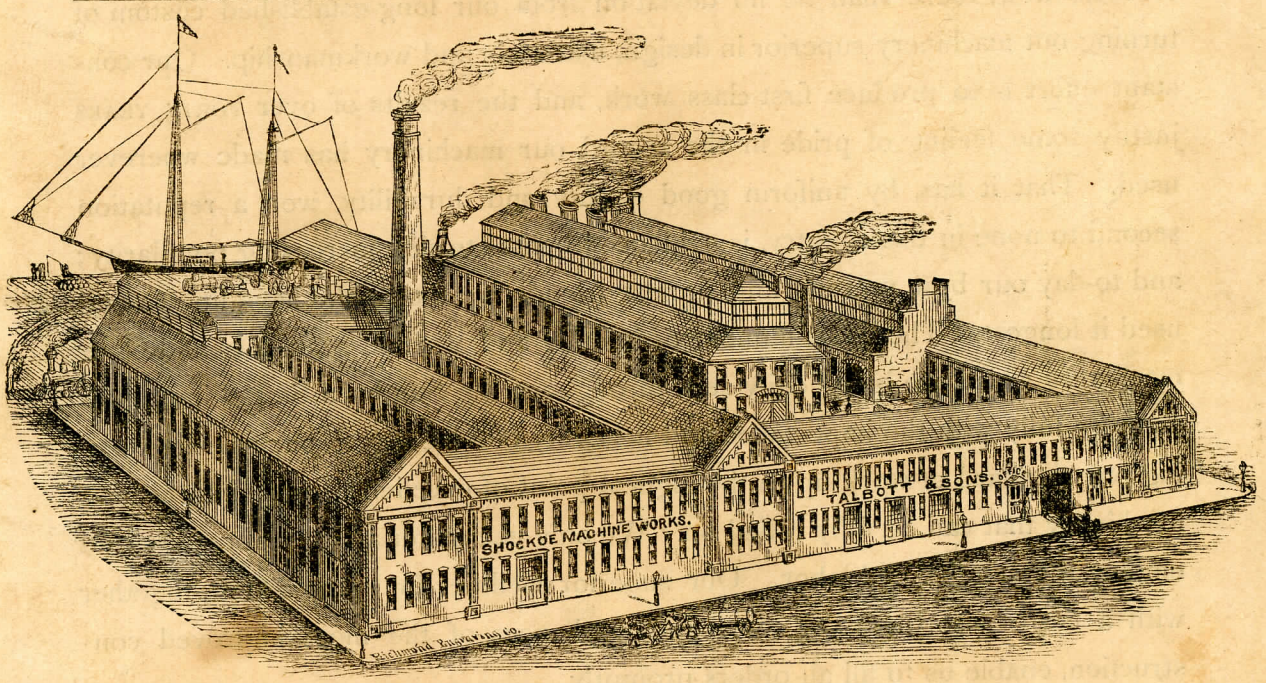
ESTABLISHED 1839.

TALBOTT & SONS,

Shockoe Machine Works

CARY AND SEVENTEENTH STREETS,

RICHMOND, VIRGINIA.



BRANCH HOUSES.

CHARLOTTE, NORTH CAROLINA

W. C. MORGAN, General Manager.

GOLDSBORO, NORTH CAROLINA

J. A. HAUSER, Manager.

J. W. FERGUSSON & SON, STEAM PRINTERS.

CIRCULAR.

In issuing this, our FORTY-FIRST Annual Circular, we propose to present to our friends and the public a brief and general description of the various articles of Machinery manufactured by us. The liberal patronage extended to us since the establishment of our Works in 1839 induces us to believe that it is due to the superiority of the machinery we have produced; and in offering our manufactures to them now, there shall be no deviation from our long-established custom of turning out machinery superior in design, materials and workmanship. Our constant effort is to produce first-class work, and the results of over FORTY YEARS justify some feeling of pride in the record our machinery has made wherever used. That it has, by uniform good quality and durability, won a reputation second to none in this country, is evidenced by its steadily increasing popularity; and to-day our best patrons and firmest friends are those who have known and used it longest. The great number of inferior and worthless engines and other machinery which are being daily sent throughout the Southern States impresses us more fully with the importance and necessity of adhering to our rule of keeping our standard of work up to the highest point of excellence, and of furnishing machinery that can be fully relied on. We only use materials of best quality, and employ the most skilled labor. Our superior facilities for manufacture, together with a large assortment of tools and appliances of the most improved construction, enable us to fill all orders promptly.

For the benefit and convenience of those who wish to examine our machinery in person before purchasing, but are too remote to visit us at our works without incurring much expense and loss of time, we have established Branch Offices at CHARLOTTE, N. C., under the management of Mr. W. C. MORGAN, and at GOLDSBORO, N. C., under the management of Mr. J. A. HAUSER, who will take pleasure in showing our machinery and giving any information desired.

FIRST PREMIUMS

AWARDED TO THE

TALBOTT ENGINES

OVER ALL COMPETITORS

—AT THE—

VIRGINIA STATE FAIR, RICHMOND, VA.,

at nearly every exhibition from 1854 to the present time.

LYNCHBURG, VA., 1874.

NORTH CAROLINA STATE FAIR (Raleigh, N. C.), 1874–75–76–77–78–79.

CHARLOTTE, N. C., 1878–79.

WADESBORO, N. C., 1879.

SOUTH CAROLINA STATE FAIR (Columbia, S. C.), 1877–78–79.

GREENVILLE, S. C., 1876–77–78.

ANDERSON, S. C., 1877.

ABBEVILLE, S. C., 1877.

CHERAW, S. C., 1878.

DARLINGTON, S. C., 1878–79.

CHARLESTON, S. C., 1879.

AUGUSTA, GA., 1870.

MACON, GA., 1878.

NEW ORLEANS, LA., and other places.

In many cases TWO to FOUR First Premiums have been awarded the TALBOTT ENGINE at a single exhibition.

Over FIFTY PREMIUMS have been awarded the TALBOTT ENGINES over all competitors.

HORSE-POWER.

THE term "Horse-Power" has been used to express the power of steam engines from the early days of Watt up to the present progressive age, and yet it has a variety of significations, the exact meaning of which seems to be either not fully comprehended, or else disregarded by many builders; for notwithstanding the fact that all builders use the same formula in their calculations, yet they differ materially in the results obtained—not only in the power at which they rate their engines and boilers by calculation, but in the actual amount of work they will perform in practice. These discrepancies are due not only to the various values placed upon the different elements of calculation, but fully as much upon the proper constructions, proportions, simplifying and adjusting of the working parts, the kind of material used, and the accuracy with which the workmanship is executed. It therefore requires a great deal of practical experience and judgment to compare any two engines and boilers of different proportion and construction, and purchasers generally will find it greatly to their advantage to avoid any effort at these comparisons and to rely entirely upon those builders whose reputation and responsibility is a better guarantee to them.

Notwithstanding the many known difficulties which the inexperienced will encounter in attempting to compare the powers of different make of engines and boilers, still some manufacturers have contracted the habit of publishing a few of their principal dimensions, and then caution the public that they should compare them with others before purchasing—each one of them attempting to create the erroneous impression that his engines and boilers are larger and more powerful than those of any other builder in the country. The motives which impel them to publish such cautions are more for their own personal benefit than for any actual necessity, for it is a well-known fact that the result of the combined dimensions of the engines of the most reliable builders do not amount to any practical difference.

The effort on the part of the inexperienced to examine these schedules of dimensions and make the necessary comparisons, generally deceives and leads into error; whereas, when examined by those who are better acquainted, frequently show a great want of uniformity in the proportions of their different powers, as well as an utter disregard of all established laws of proportions and dimensions, and sometimes contradiction, ignorance, or willful deception. The advice offered is in no way practical, for it is too well known that nine-tenths of the engines and boilers built are purchased by those who are not sufficiently acquainted with the different elements of calculation necessary to make these comparisons. Very few builders use the same proportions, and yet the result may be the same. The engine-cylinder of one may be a little larger in diameter, but of shorter stroke, than another; the boiler of larger diameter, but not so long; the tubes may differ in number, diameter and length, and the fire-box of different proportions, and yet the combined proportions of both engine and boiler may be the same. A small difference in the capacity of the cylinder, or a few feet more of heating surface in the boiler, does not of necessity make any practical difference in the power. It is of more importance that the working or life parts be reduced and simplified, and of proper construction and proportion; that the materials should be of the proper kind, and the workmanship executed with accuracy. There is a vast difference between "nominal" and "actual" horse-power, the former being applied to the size of an engine irrespective of certain other conditions, while the latter is the actual power or work it will perform in practice. It is common to see an engine and boiler of one builder doing its work with ease, economy and satisfaction, while a next-door neighbor, using one of another builder, having larger dimensions, fails to do the same amount of work.

We believe, from our long experience in building engines and boilers, we have arrived at that degree of perfection that justifies us in claiming for ours all that belongs to those of first-class construction. We do not assert that they are larger or more powerful than any other builder in the whole world, but only claim that they are of good and liberal proportions, of fully as much power as we represent, and of the best materials and workmanship—all of which are evidenced by the many testimonials we have received from those who are using them. Every engine is tested in the most practical as well as theoretical manner, and any one purchasing from us will be furnished a full guarantee.

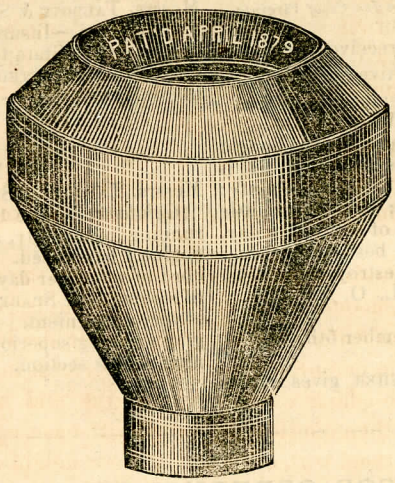
SPARK ARRESTERS.

A LONG-FELT WANT SUPPLIED.

APPREHENSIONS of fire from sparks have deprived a large number of persons of the advantages of that great labor-saving machine—the Steam Engine, for ginning, threshing, grinding, sawing, and general plantation use; and many of those more enterprising ones who have availed themselves of the great economy of steam power, which enables them to get out their products promptly and place them upon an advantageous market, have done so fearing that at any moment their entire property might be destroyed by fire. These apprehensions may now be greatly allayed by the use of TALBOTT'S PATENT SPARK ARRESTER, which was introduced the past season and used with great success over a vast territory. The real merits of this Arrester have won for it a wide-spread reputation, as is proven by the daily increased demand for them from all parts of the Southern States, to be attached to nearly every make of engine now in use; and insurance companies are offering to take risks on steam-power where Talbott's Patent Arrester is used at the same rate as on animal or water-power.

Talbott's patent is a more perfect and reliable Arrester than has heretofore been used. It differs in principle from the old beaten track of attempting to arrest sparks with wire-cloth or pans of water, both of which should be called *draft-destroyers* rather than spark-arresters. It has long been demonstrated that wire-cloth arrests but few sparks, and will soon choke up and destroy the draft; and that water as an arrester of sparks is contrary to theory and practice. It is well known the higher the temperature of the escaping gas or smoke, the better the draft, and if it is passed through or over water the temperature is very much reduced and the draft materially injured. All water arresters, to obtain sufficient draft, are necessarily arranged with *direct dampers*, to be opened when raising steam, and which, through neglect or necessity to keep up steam when running, are liable to be left open and allow sparks to escape. They depend upon the exhaust steam, aided by a jet of live steam drawn from the boiler to create an artificial draft so as to be able to keep up sufficient steam. They soon lose their efficiency by the evaporation of water; or if the accumulated cinders, which form a bed of live coals on the surface of the water, are not frequently removed, sparks will escape from the stack. Water, applied in any way as an arrester, which destroys the draft, permits sparks to escape, requiring frequent and constant attention in refilling with water and cleaning out, rusting and eating out the boiler and keeping it in a filthy condition, must be condemned by all, and will soon fail to attract the attention even of those who at present do not know of these serious objections.

[PLATE 1.]



Talbott's Patent Spark Arrester is efficient and simple in construction, and avoids the objections to all others now in use. It is an entirely new departure, based on scientific principles, consisting of a deflecting arrangement placed at the top of the stack (the point at which the sparks should be arrested), which throws the sparks from a conducting current to a non-conductor, literally taking them from the escaping gas or smoke and returning them down the stack, where they are extinguished or consumed, or deposited in the smoke-box, and is, therefore, a *Spark Arrester, Extinguisher, and Consumer.*

The great efficiency of this Arrester is attracting universal attention, and is being endorsed by the best mechanical engineers and insurance companies. Its prominent features are:—

It does not destroy the draft.

It does not interfere with cleaning the tubes.

It will not choke up, and requires no cleaning.

It requires no direct dampers to be opened when raising steam (dampers being objectionable, as they may be left open and allow sparks to escape).

It requires no water to extinguish sparks, which, by condensation, destroys the draft. Besides, when water is used, if neglected, the efficiency is destroyed by evaporation of the water, and the boiler is kept in a filthy condition.

It is simple and durable, and can be relied upon.

It can be attached to any boiler.

No planter should be without one of them. Insurance companies will insure gins and barns where the Talbott Engines and Spark Arresters are used at same rate as charged for water or horse-power.

We submit the opinion of leading insurance men of Richmond as to the merits of Talbott's Patent Spark Arrester:

RICHMOND, VA., May 28th, 1879.

We, the undersigned, representatives of various insurance companies of this city and elsewhere, had the pleasure of witnessing, on the *night* of May 26th, a test of the TALBOTT PATENT SPARK ARRESTER, which is now used on the engines manufactured by Messrs. Talbott & Sons, Richmond, Va., the well-known engine builders of the South. This Arrester was invented especially for engines used for ginning, threshing, sawing, and general plantation use, and in our opinion is a complete success. In the test, two engines—similar in all respects, each carrying eighty pounds of steam, and using dry pine wood for fuel—were placed side by side, one having no Arrester, and the other supplied with the Talbott Patent Spark Arrester. Each engine was worked up to

its full power, and performed its work perfectly. The one without the Arrester threw out a large number of sparks, large and small, while the one with the Arrester held them securely and prevented their escape, thereby precluding the possibility of danger from fire by the escape of sparks. The draft was uninjured in the slightest degree, so far as we could discover, and the engine steamed as well as if it had no Arrester.

The engine with the Spark Arrester was put to the severest test, demonstrating the great utility of this invention of the Messrs. Talbott & Sons, and securing to planters and others interested protection against fire—a protection so much needed by those using that labor-saving machine, the steam engine, for general plantation use.

The simplicity, efficiency and great utility of the Talbott Patent Spark Arrester is so apparent, and so fully meets the demands of a great interest, that we cordially *endorse* and *recommend* it to those using steam-power.

B. C. WHERRY, JR.,
Secretary Virginia Home Insurance Co.
W. H. MCCARTHY,
Secretary Virginia Fire and Marine Ins. Co.
T. G. PEYTON,
Secretary Granite Insurance Company.
JNO. B. GRANT,
Assistant Secretary City Fire Insurance Co.
HORACE SWINEFORD,
Agent.
F. D. STEGER,
Secretary Mutual Assurance Society of Virginia.
J. B. WILSON;
Asst. Sec. Merchants and Mechanics Ins. Co. of Virginia.

We also submit a few testimonials received from parties having the SPARK ARRESTER in active operation:

BEAVER DAM, S. C., November 5th, 1879.
Messrs. TALBOTT & SONS, Richmond, Va.:

Dear Sirs,—The 5-horse power Planter Engine bought of you last August has given perfect satisfaction. It is the most simple engine of all others in use in this county; an ordinary farm hand can manage it; it requires little fuel and steams freely, ginning 5 bales of cotton per day. Your PATENT SPARK ARRESTER is the best in use; does not obstruct the draft and completely destroys the sparks.

Yours truly, J. L. O. MARET.

MARLBORO, N. C., September 5th, 1879.
Messrs. TALBOTT & SONS:

Gentlemen,—The SPARK EXTINGUISHER gives entire satisfaction. (This Arrester is on a 25-horse power engine and boiler.) JAS. JOYNER.

YORKVILLE, S. C., December 22d, 1879.
Messrs. TALBOTT & SONS, Richmond, Va.:

Dear Sirs,—I am well pleased with the 12-horse power Planter Engine. It is all right, and in my opinion is the best engine made for plantation work. It is so simple that any one can keep it in running order. I have not had a particle of trouble or expense during the entire season, although I had previously no experience with steam-power. The SPARK ARRESTER is perfect.

Yours with respect, L. R. WILLIAMS.

KEANONSVILLE, N. C., September 28th, 1879.
Mr. J. A. HAUSER, Goldsboro, N. C.:

Dear Sirs,—The 12-horse power Planter Engine, with TALBOTT'S IMPROVED SPARK ARRESTER and 55-saw Winslip Cotton Gin, has come fully up to your guarantee and gives entire satisfaction. It is admired by all those that have seen it in operation.

Yours truly, A. D. MCGOWEN.

ENFIELD, N. C., September 25th, 1879.
Messrs. TALBOTT & SONS, Richmond, Va.:

Dear Sir,—I have put on the SPARK ARRESTER and thoroughly tested it, and find it to be all you claim for it.

Yours respectfully, H K. REID.

RALEIGH, N. C, October 2d, 1879.
Messrs. TALBOTT & SONS;

Gentlemen,—Insurance companies have ordered all agents in this State to insure gins run with your Engine and SPARK ARRESTER at the same rate as water-power—the only Arrester insured at this rate.

Truly, W. ALLCOTT.

MT. MOURN, N. C., October 2d, 1878.
Messrs. TALBOTT & SONS:

Gentlemen,—The 10-horse power Standard Engine is running beautifully, and thus far proves superior to any engine I have used. It steams free, requires not over a cord of wood per day, and drives the gin with 30 pounds of steam. The SPARK ARRESTER confines all sparks, and is very convenient. I can recommend the Talbott Engine as being superior to any other make of engine running in this section. Yours respectfully,

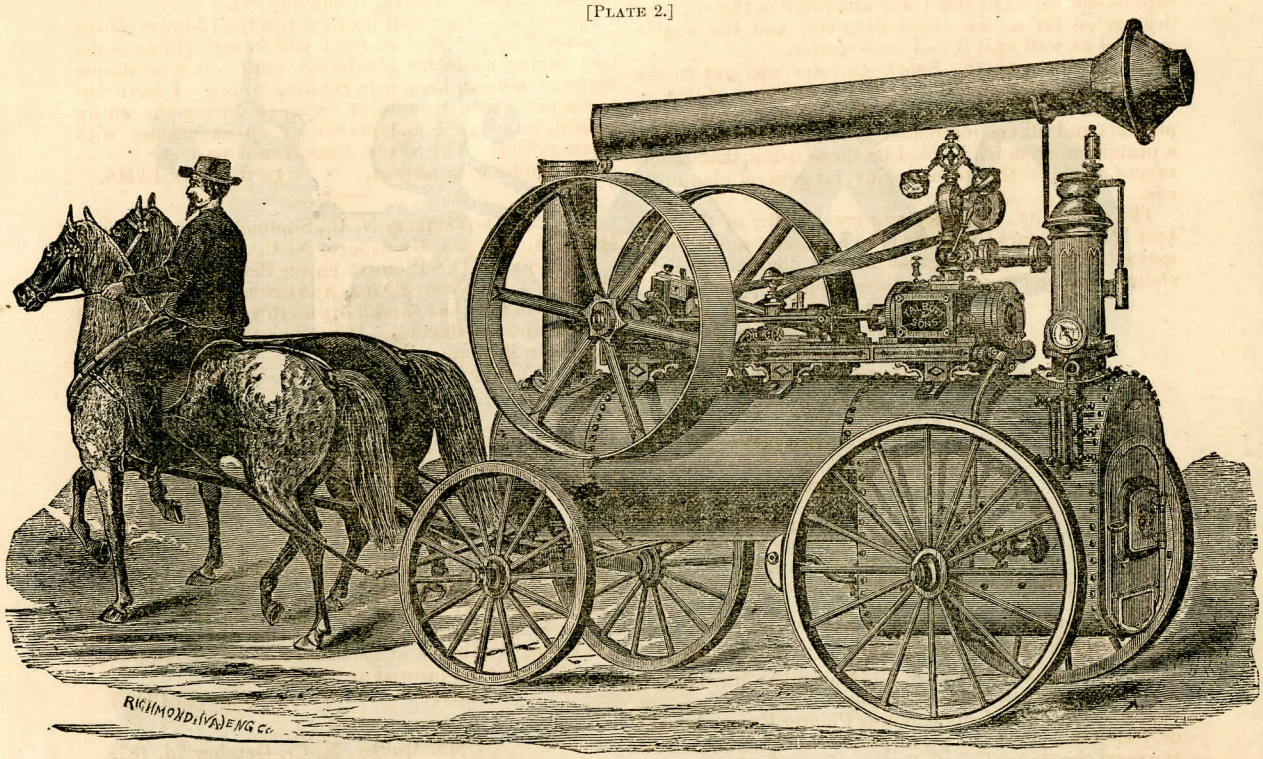
A. M. COWAN.

DIRECTIONS FOR ORDERING SPARK ARRESTERS.

Those wishing our PATENT SPARK ARRESTERS for Engines now in use, will give the exact diameter or circumference of smoke-stack at its top where the Arrester is attached. Name horse-power, style and maker of boiler.

The "Standard" Portable Engine and Boiler, on Wheels.

[PLATE 2.]



From 6 to 18-Horse Power, inclusive—are made with Circulating Water Bottom Boilers.

From 20 to 40-Horse Power—are made with Open-Bottom Fire-box Boilers, unless otherwise ordered.

WE beg to call attention to our Engines, Boilers, Saw Mills, and a great variety of other machinery, which have been used throughout the Southern States for over forty years past, and have always met with the highest appreciation and praise. We have put in operation over TWO THOUSAND Engines of different kinds and sizes, and the constantly increasing demand for them is a strong evidence of their great superiority. The engravings herein given illustrate the various styles and sizes we build and generally keep in regular stock.

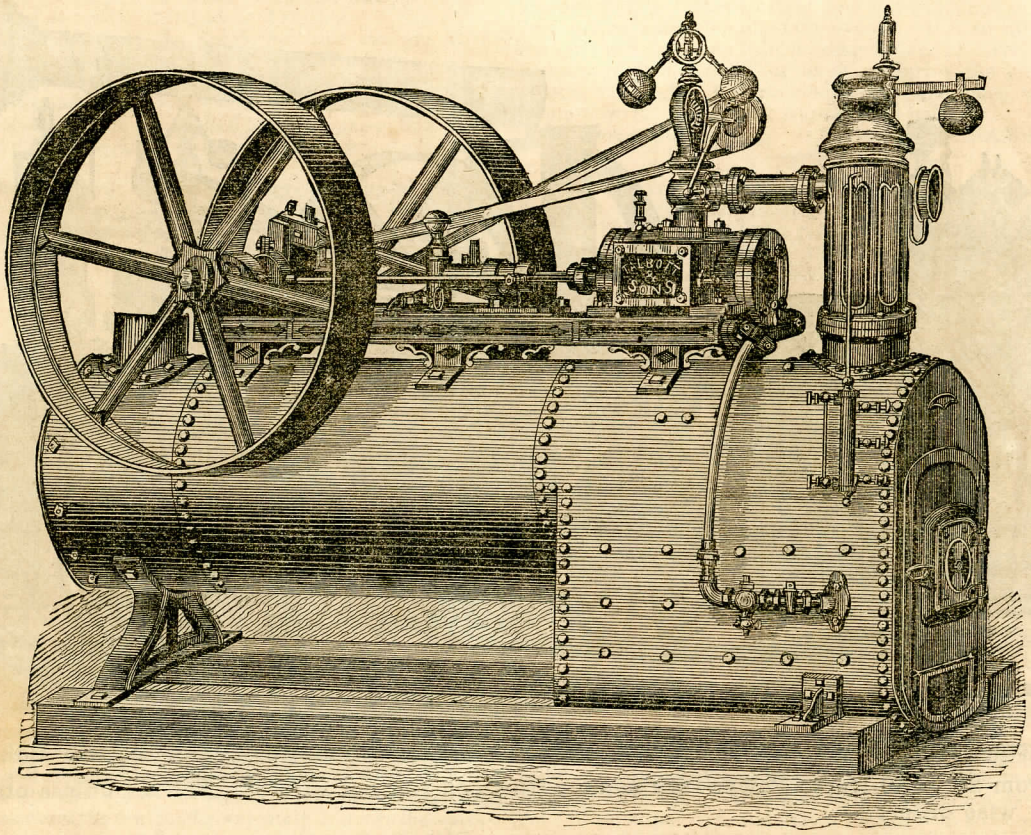
The neat and pleasing design, the superior construction and proportions of the various parts, the unequalled simplicity, durability and economy, the high grade of materials and skilled labor employed in their construction, together with the universal satisfaction they have given, and the ease with which they are managed by inexperienced labor, have justly entitled them as "The Standard" of comparison.

Our Boilers are built upon the most approved plans and of the best materials and workmanship. We use flues of such diameter (depending upon the length) as we have found by long experience will furnish the best draft and greatest economy in fuel. The maximum number of feet of *heating surface per horse-power* is allowed, and will generate more steam than the estimated power of the engines to which they are connected. Upon this chiefly depends the power and successful working of all engines. They are supplied with large Drums, which furnish ample room for the accumulation of steam. These Drums are also surmounted by a Cap or Dome, so constructed as to work only *dry* steam and prevent the passage of *water* in the cylinder, which is so disastrous to it. The Fire-box is very large and stayed in an ususually strong manner. The connections between Boiler and Cylinder, being very short, presents but little surface for condensation, thereby obtaining *the greatest effect of dry steam.* In fact, the entire boiler is constructed with a view to safety and economy.

Our Engines are constructed with the greatest

The "Standard" Portable Engine and Boiler, on Skids.

[PLATE 3.]



6, 8, 10, 12, 15 and 18-Horse Powers.

possible care in regard to principle, workmanship and materials, always keeping in view the difficulties under which purchasers labor with the frequent repairs on inferior and improperly proportioned work. The Cylinders, Slides, Pillow-blocks, and all other working parts, are accurately fitted to a Bed-frame, which is securely bolted to the Boiler, but forms a solid and independent foundation, and removes the greater part of the strain from the Boiler, which would otherwise receive it. The principal parts being made in separate pieces and accurately fitted together, they can be renewed without interfering with other parts when worn out or broken by accident, and thus avoid the trouble and great expense of sending the entire engine to the shop, or throwing it away, as is the case when so many of the parts are made in one piece. The Bed-frame, being hollow and communicating with the Smoke-chimney, not only subserves the purpose of an exhaust-pipe for creating draft and extinguishing sparks, but also forms a heater by the Feed-pipe passing through it, which, being surrounded by exhaust steam, causes the water to become heated before going into the Boiler.

The Cylinder is surrounded by an outside jacket, which, being filled with steam, prevents condensation in the Cylinder. The Heads are made steam-tight, with *ground*-joints in place of gum-packing. The Piston has self-acting springs, which always keep it sufficiently packed,

The Slides, Cross-head and Gibs are so arranged that there is no liability of getting out of a *true line* with the bore of the Cylinder, and which, of course, prevents wear and friction on the Piston.

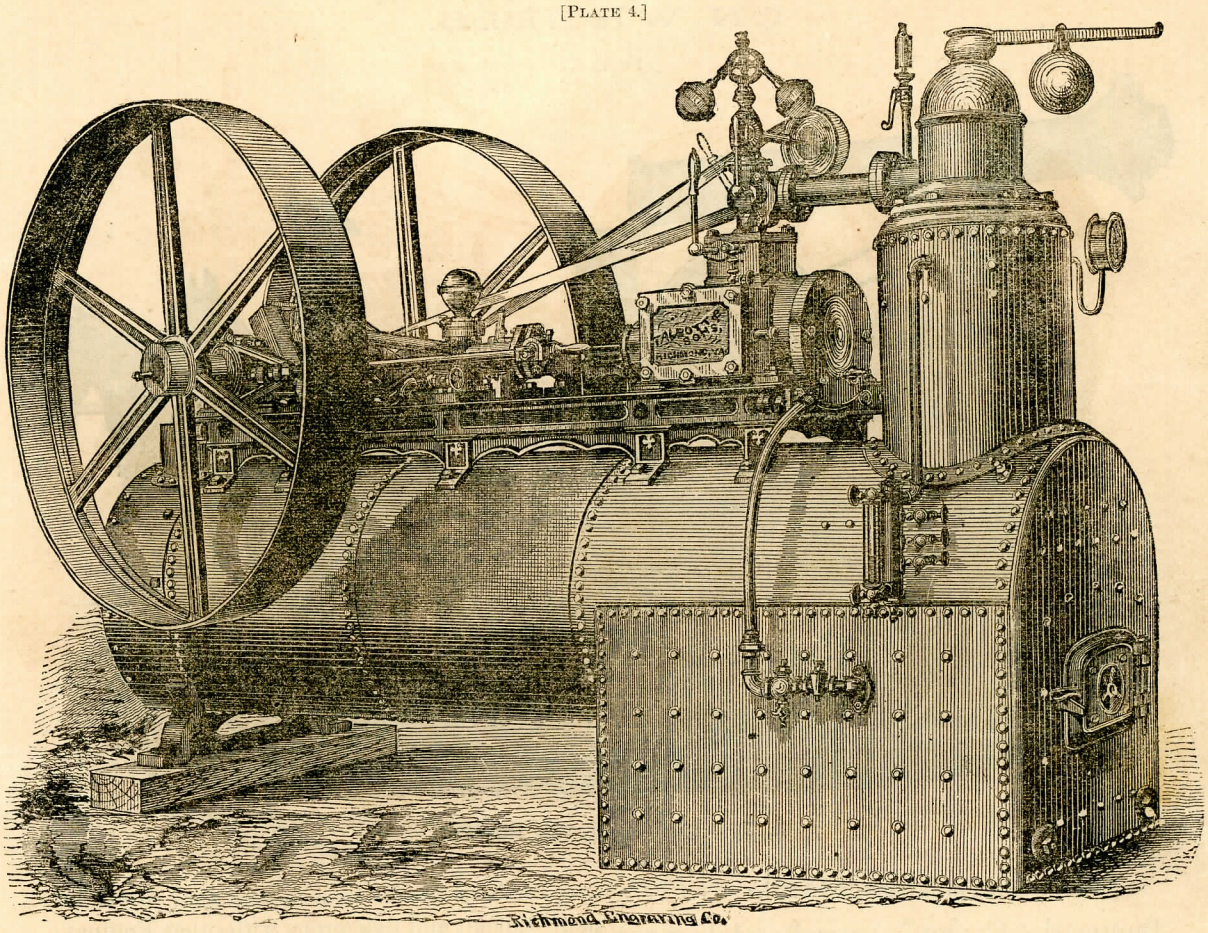
The Gibs are brass, self-oiling, and the wear is removed with unusual facility.

The Pillow-blocks are so constructed as to take up the wear on the brasses without creating friction or binding the shaft.

The Crank is *forged of best hammered iron.* It

The "STANDARD" PORTABLE ENGINE and BOILER

[PLATE 4.]



20, 25, 30, 35 and 40-Horse Powers.

is very heavy, and all the Journals work in brass boxes.

The Feed-pump is simple, and never fails to perform its duty. The Plunger and main Valve-stem, being bolted together, form a guide for each other, and both are driven from one eccentric.

OUR PATENT COMBINED GOVERNOR AND SAWYER'S REGULATING VALVE is particularly sensitive, and regulates the Engine perfectly under any change to which it may be subjected. When it is used in connection with a Saw Mill it is really invaluable and cannot well be dispensed with. It is so arranged that the speed of the Engine can be changed to suit the size log being sawed. The sawyer has full control of the Engine; he can start or stop, or instantly change so as to run with or without the Governor, at will, and that, too, without moving from his position at the mill, or stopping to throw off belts or make other mechanical changes. With this variable speed, at least twenty-five per cent. more lumber can be turned out in the same length of time, and with less injury to the machinery.

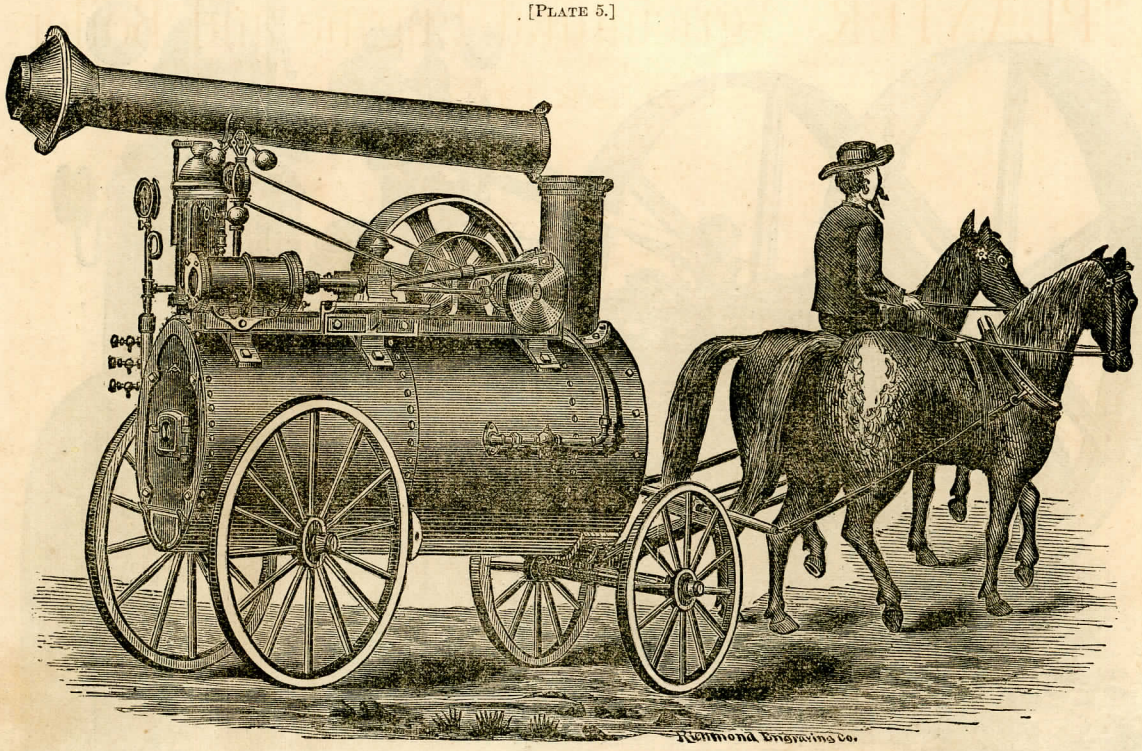
OUR PATENT METHOD OF TAPPING BOLTS INTO BOILERS is worthy of special notice. It effectually obviates the trouble and annoyance from leakage, and the stripping or breaking of bolts, to which those of all other builders are subjected. The bolts which secure the Bed-frame to the Boiler (and which is the case with all other bolts tapped in our boilers) are so arranged that none of them come in contact with steam or water, and can be taken out under any pressure of steam.

The working parts of our Portable and Stationary Engines are similar in every respect. All of them have two Fly or Band-wheels, and everything necessary to a complete engine is furnished.

The Improved "Planter" Agricultural Engine and Boiler

ON WHEELS.

[PLATE 5.]



5, 7, 9 and 12-Horse Powers.

Special attention is directed to the

Improved "Planter" Agricultural Engines

for Ginning, Threshing, Grinding, Sawing, and all other purposes to which steam-power may be applied. While these Engines enjoy the same enviable reputation as "The Standard," yet, on account of their great simplicity of construction, we are enabled to build them at a much reduced cost, and thus meet the wants that planters for many years have felt, by offering them a *cheap* and *first-class* Engine and Boiler. They are made of the best materials and workmanship, and are so simple that they can be managed by any ordinary plantation hand. When mounted on wheels for strictly portable or agricultural purposes, they are conceded to be unequalled. The *clearance* or space between bottom of boiler and ground being greater than can be obtained in boilers of any other form, without making them top-heavy or the working parts difficult to get at, together with the extremely light weight and short couple, enables them, with ordinary teams, to be hauled over roads or carried in localities that would be more difficult and dangerous with other Engines.

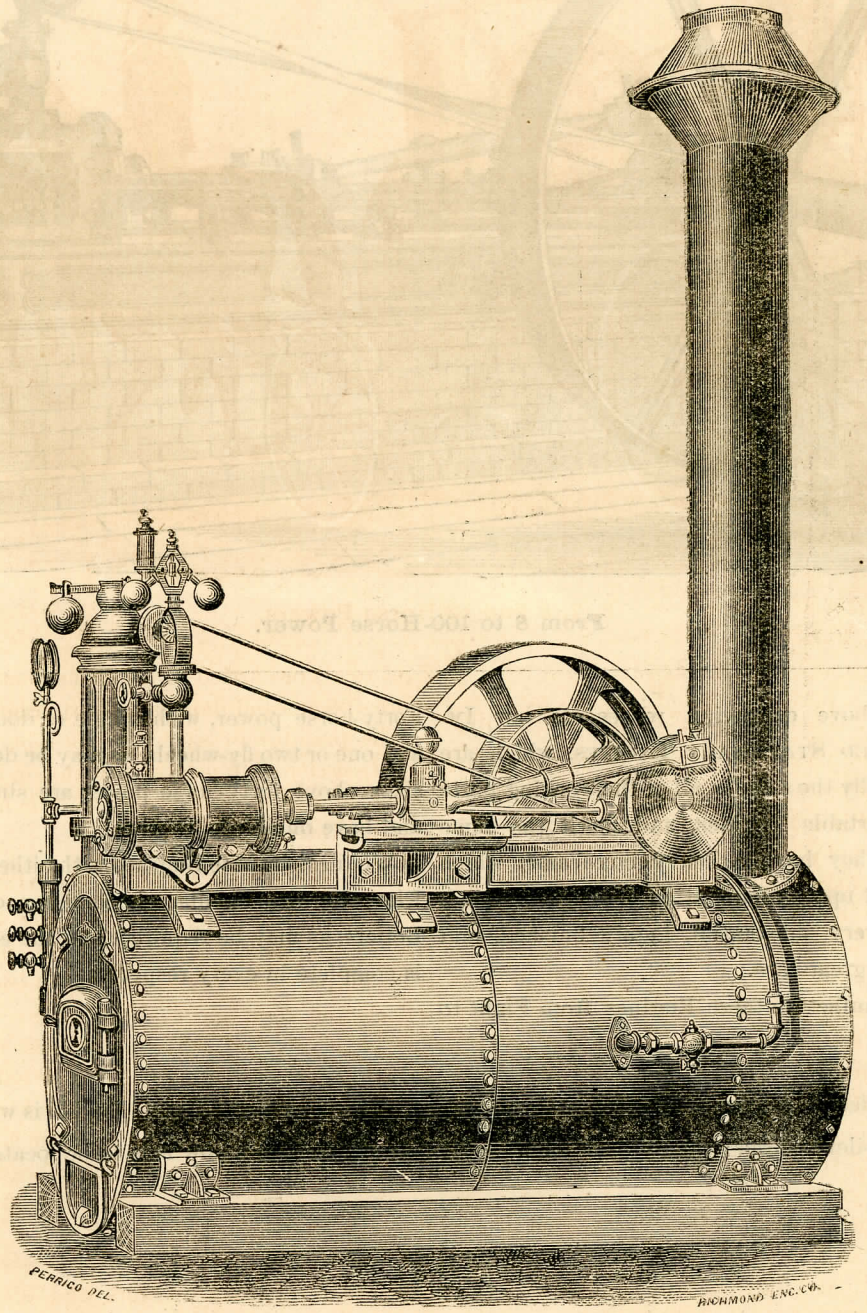
The practice of working *very high steam* and *rapid velocity* is unnecessary with our Engines in order to obtain the power at which they are rated. Our

PLANTATION ENGINES

are supplied with our NEW PATENT SPARK ARRESTER, and when they are used for strictly portable purposes, are mounted on substantial iron wheels and complete running gear. From long experience we find that *iron* wheels are greatly to be preferred, as they are not liable to the break-downs of wooden ones, caused by decay or shrinkage from heat. In fact, we believe the Engines now manufactured by us are more complete and perfect, and have given more entire satisfaction, than those of any other builder in the country, and the many advantages they possess should induce planters and others (especially those who are remote from good machine shops) to purchase our Engines.

THE IMPROVED
"PLANTER" Agricultural Engine and Boiler
ON SKIDS.

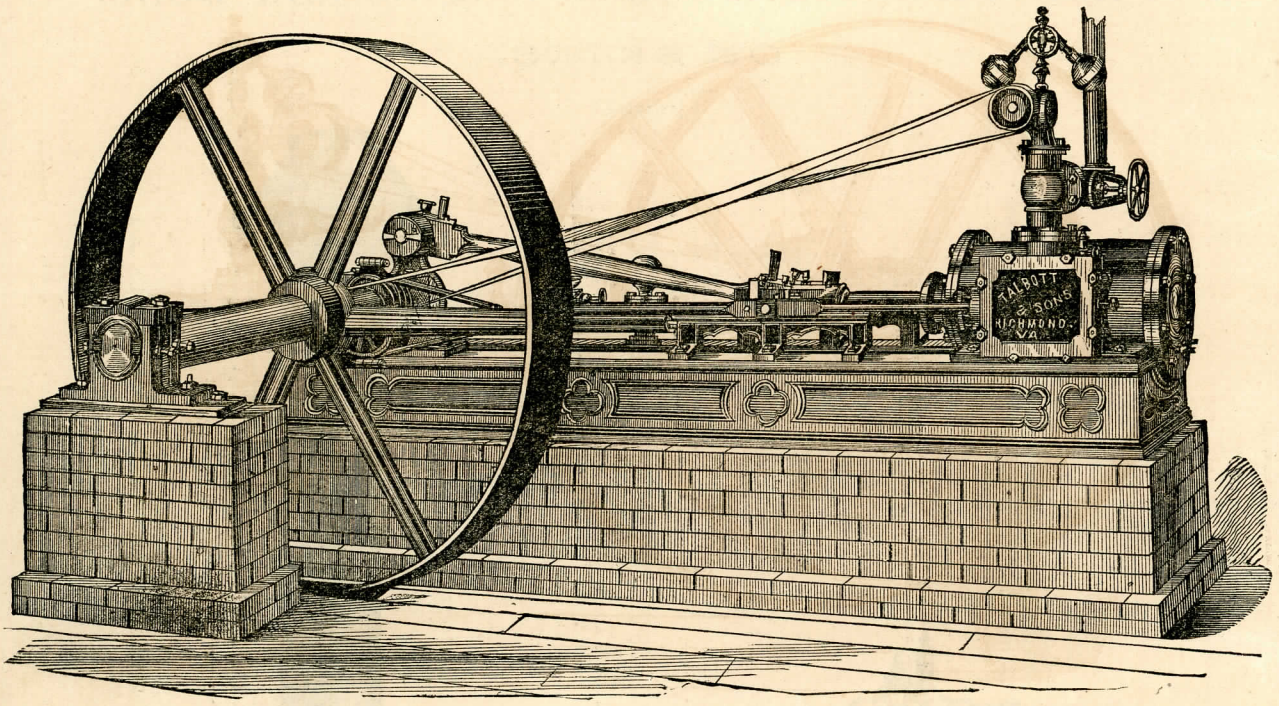
[PLATE 6.]



5, 7, 9 and 12-Horse Powers.

The "Standard" Stationary Engine.

[PLATE 7.]



From 8 to 100-Horse Power.

THE above engraving represents our IMPROVED STATIONARY ENGINES, which are substantially the same in all of the working parts as our Portable Engines, and merit the same praise. They have a heavy box-frame, which may be set upon a foundation of brick or wood, and are very substantial, highly finished, and built with great care.

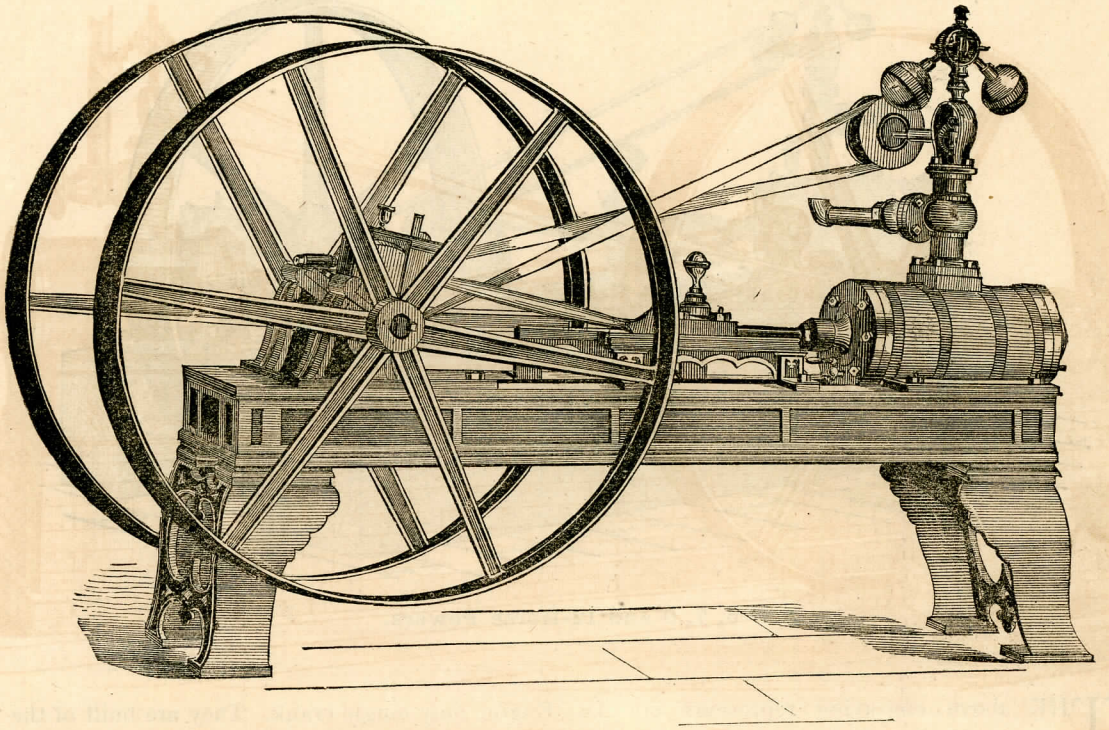
We manufacture these Engines from Eight to Forty-horse power, with single or double crank, and one or two fly-wheels, as may be desired. All sizes above forty-horse power are single crank, and have one large fly-wheel.

We furnish these Engines with either Cylinder, Flue, Return Tubular, Locomotive or Upright Boilers, as may be required, and the entire outfit is complete in every respect.

In ordering Stationary Outfits, state whether a Single or Double-Crank Engine is wanted; the kind of Boiler desired; the purpose for which it is to be used, and how it is to be located.

The "Standard" Stationary Engine.

[PLATE 8.]



From 8 to 20-Horse Power.

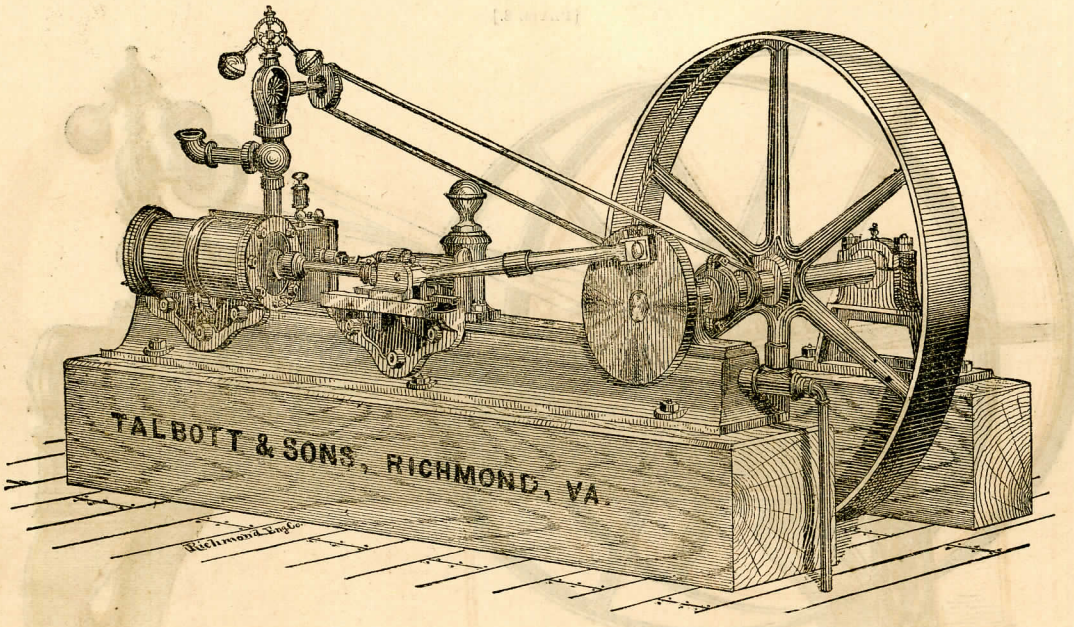
THE above engraving represents our small size STATIONARY ENGINES, mounted on substantial iron legs, which dispense with the ordinary foundation of wood or brick, rendering them convenient, accessible, and giving them a handsome appearance at a small additional cost. They are especially suited to be placed on the floors above ground, or other localities where it is not convenient to build the ordinary foundations.

We make these Engines with single or double crank, and one or two fly-wheels, as may be desired, and furnish them with any kind of Boiler required; and the entire outfit is complete in every respect.

With Stationary Outfits we furnish all of the necessary drawings and instructions required to put them up properly.

The Improved "Planter" Stationary Engine.

[PLATE 9.]



5, 7, 9 and 12-Horse Powers.

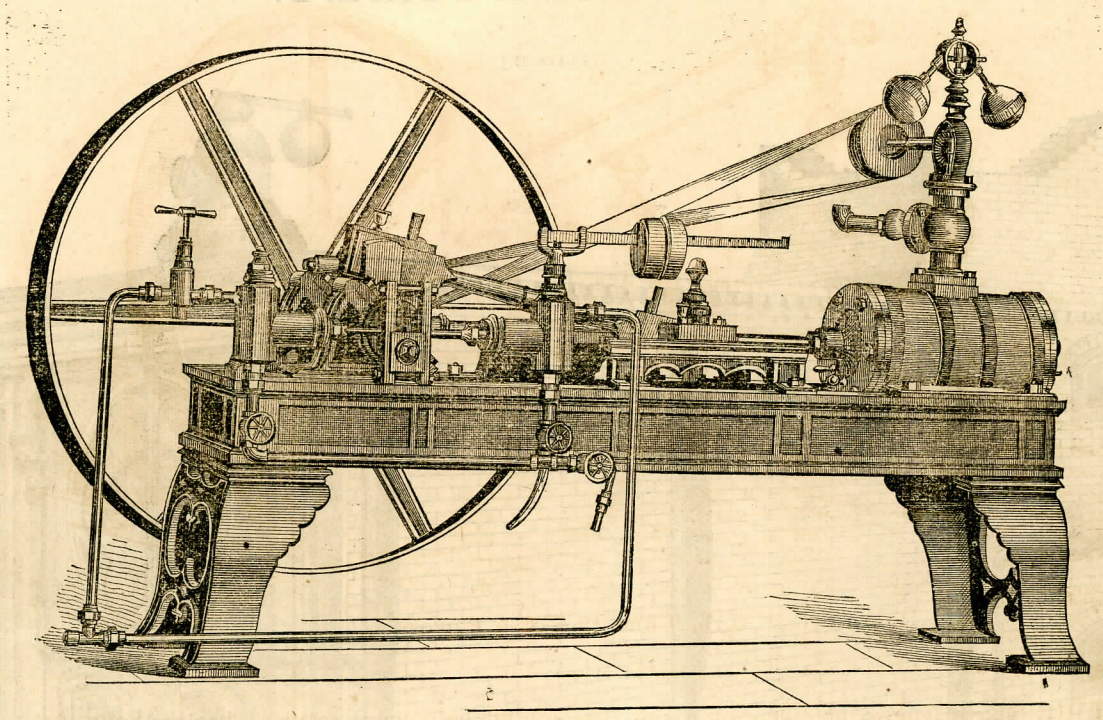
THE above engraving represents our IMPROVED "PLANTER" STATIONARY ENGINES, which are the same in all of the working parts as our Portable "Planters." These Engines have a heavy single frame, in which is formed a Heater, and they may be placed upon a wood or brick foundation, as preferred. We make this style of Engine only single crank. They are built of the best materials and workmanship, and very simple and easily put up and managed, and are, without doubt, the cheapest *first-class* Engine that can be found. We furnish any style of Boiler required, and the entire outfit is complete in every respect

---

Our Engines and Mills do not require a skillful person to erect and start them; but when any purchaser desires it, we will send a competent workman, whose per diem and expenses will be charged for. Putting up and starting machinery of any kind properly, frequently saves delay and expense.

Stationary Engine with Hydraulic Pumps Attached.

[PLATE 10.]



10 and 12-Horse Powers.

THE above engraving represents our special STATIONARY ENGINE WITH HYDRAULIC PUMPS ATTACHED, mounted on substantial iron legs, which dispenses with the ordinary foundation of brick and wood, rendering it convenient and accessible, and giving it a handsome appearance. It is the style we usually furnish tobacco factories for operating Hydraulic Presses, Lump Machines, Elevators, and other machinery used in the manufacture of tobacco, and no large factory can afford to be without so great a labor-saving machine. They are built with the greatest care in material and workmanship, and are extremely simple and easily managed. We also furnish this Engine with Independent Belt-Pump when the purchaser desires it or the location requires it.

TOBACCO FACTORY MACHINERY.

We call special attention to this branch of our business, in which we have been more extensively engaged during the past forty years than any other establishment in the country. We keep constantly on hand and build to order Hydraulic Hand and Power Pumps, Hydraulic Shape and Finishing Presses, Pot or Finishing Mills and Division Boards, Screw-Box Presses, Box Bands and Billets, Hogshead Screws, Levers, Sinkers, Casing Machines, Lump Machines, Licorice Boilers, &c. Special attention is directed to our

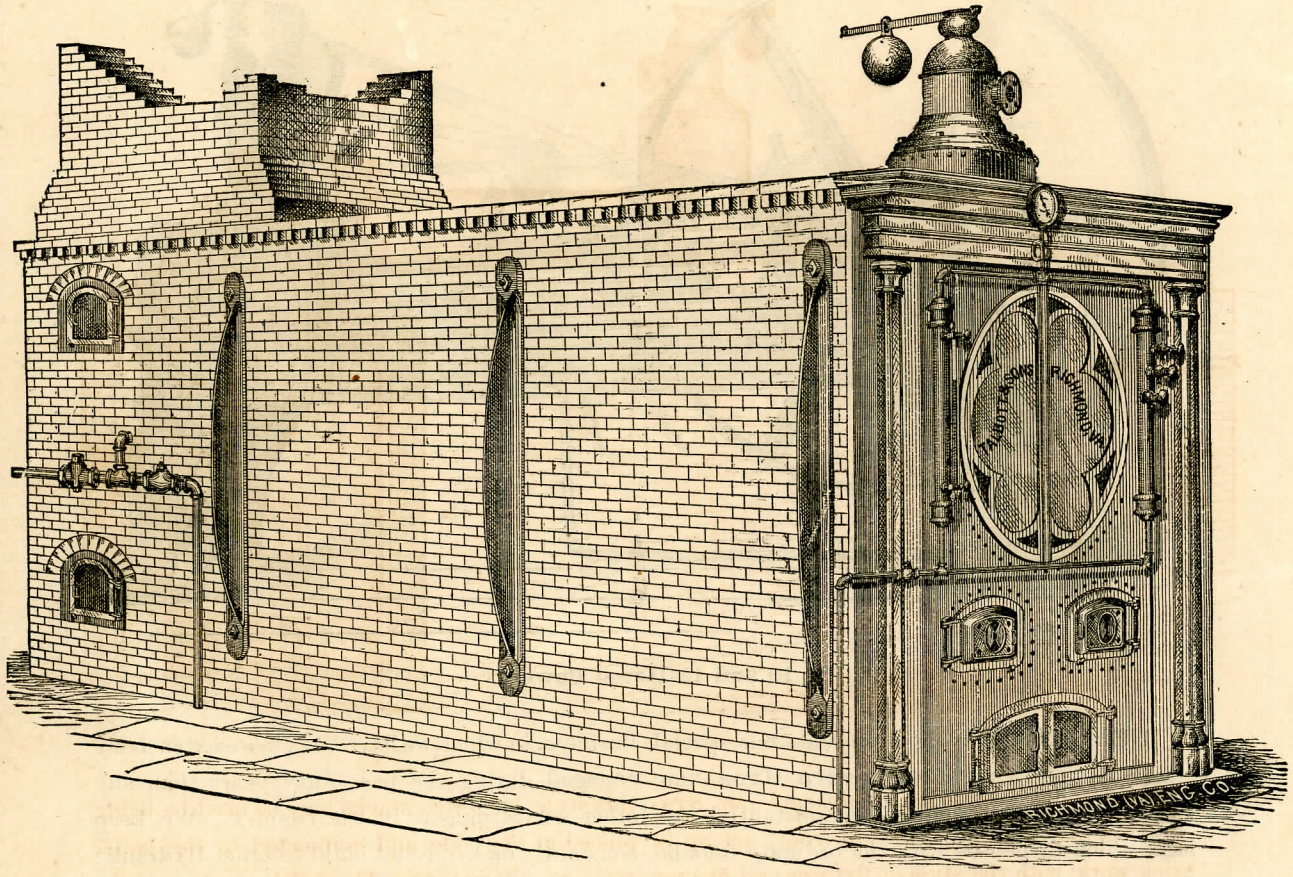
PATENT HYDRAULIC PRESS

for compressing Leaf Tobacco and Stems in hogsheads, tierces, boxes, &c. With this Press a cheaper labor may be employed, a greater and more uniform pressure obtained, besides making a saving of fifty per cent. in labor. Further information, with photograph, will be furnished on application.

STATIONARY BOILERS

WITH FULL-FRONT.

[PLATE 11.]

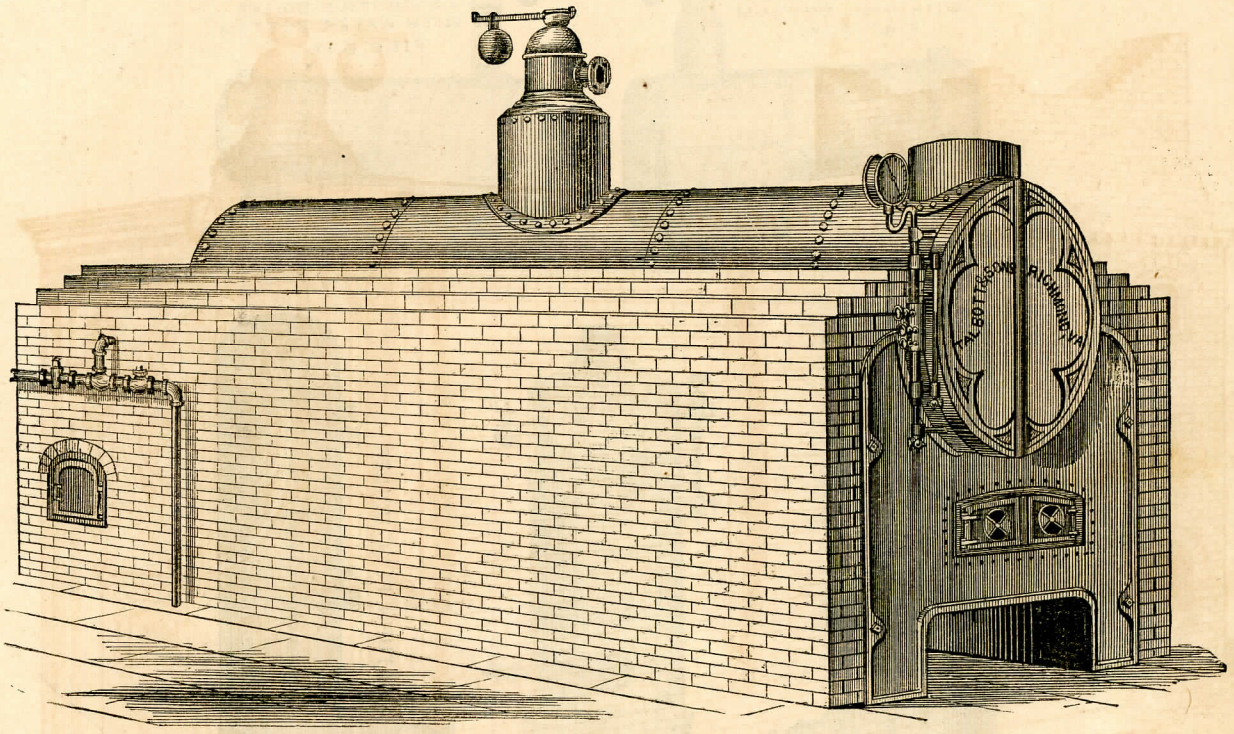


THE above engraving represents our STATIONARY BOILERS (with full-front) set up in brick work, with the style of fixtures and fittings with which we equip them, and is suited for either a Return-Tubular or Return-Flue Boiler. It is the kind more commonly used with Stationary Engines, and is also extensively used on account of its great economy in fuel for heating purposes, such as public buildings, factories, &c., especially when boilers of large capacity are required. We furnish this style Boiler of any desired size, either single or in gangs of two or more to make up any required power. When brick stacks (which are preferred) are not desired, on account of expense, we furnish them of iron to suit, and they may be situated at front end of boiler for a single return, or at the back end for a double return, as shown above, as the location requires. These Boilers, like all others built by us, are made of the best quality iron and workmanship. They are complete, with very handsome and substantial full-front and dead-plates, grate and bearing-bars, wall-binders, bolts, dust-doors, supporting brackets, bars for top flue (when stack is at rear end), safety-valve and dry-dome, hand-hole plates, check-valve and blow-cock, guage-cocks, steam and water-gauges, stand-pipe and fittings complete, ready to be set up in brick work.

STATIONARY BOILERS

WITH HALF-FRONT.

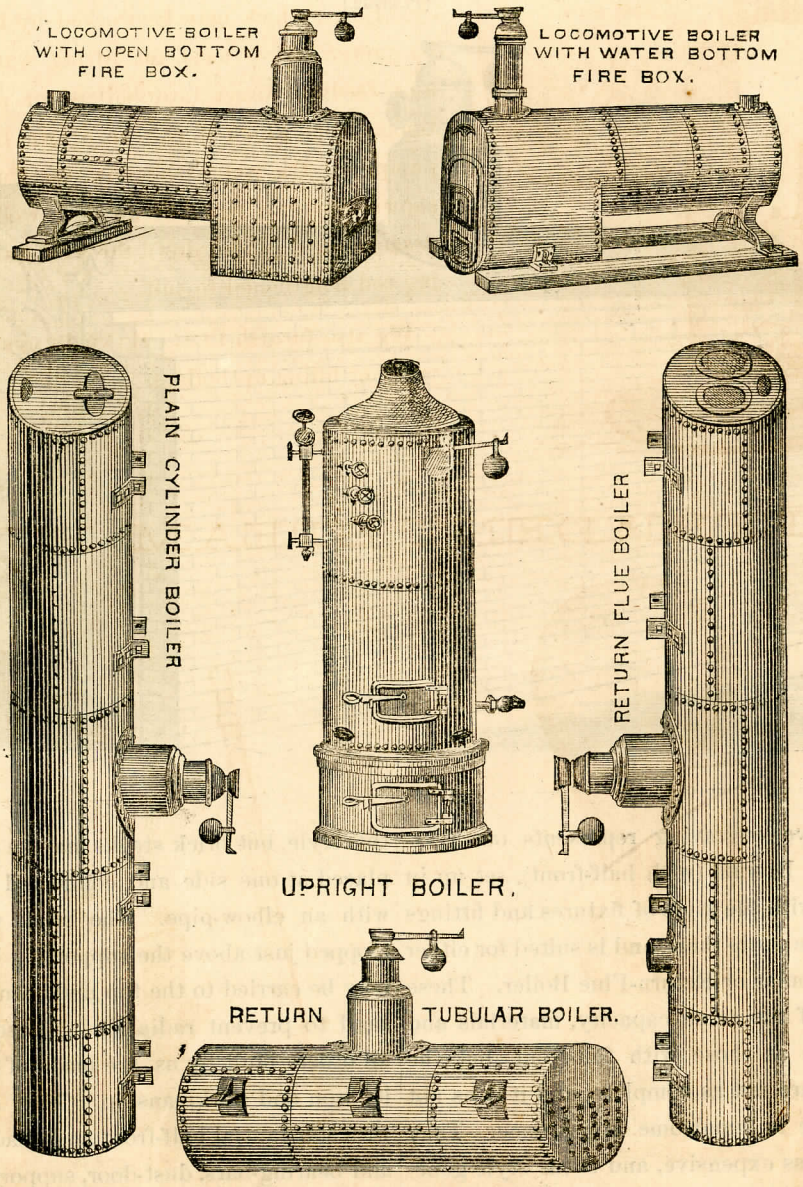
[PLATE12.]



THE above engraving represents our STATIONARY BOILER (with half-front), set up in brick work, with the style of fixtures and fittings with which we equip them, and is suited for either a Return-Tubular or Return-Flue Boiler. These Boilers are of the same capacity, materials and workmanship as those with full-front, but the equipments are not as complete, and it does not present quite as handsome appearance. They are a little less expensive, and is the style generally furnished by other builders. We furnish these Boilers of any required power, and they are suited for the same purpose as those with full-front. Iron stacks are generally used with this style, but brick stacks may be used by being placed at one side and connected to the boiler with an elbow-pipe. The brick work may be stopped just above the supporting brackets, or it may be carried to the top and then filled in with sand to prevent radiation. These Boilers, like all others built by us, are made of the best quality iron and workmanship. They are complete, with substantial half-front and dead-plates, grate and bearing-bars, dust-door, supporting brackets, safety-valve and dry-dome, hand-hold plates, check-valve and blow-cock, gauge-cocks, steam and water-gauges, stand-pipe and fittings complete, ready to be set up in brick work.

BOILERS.

[PLATE 13.]

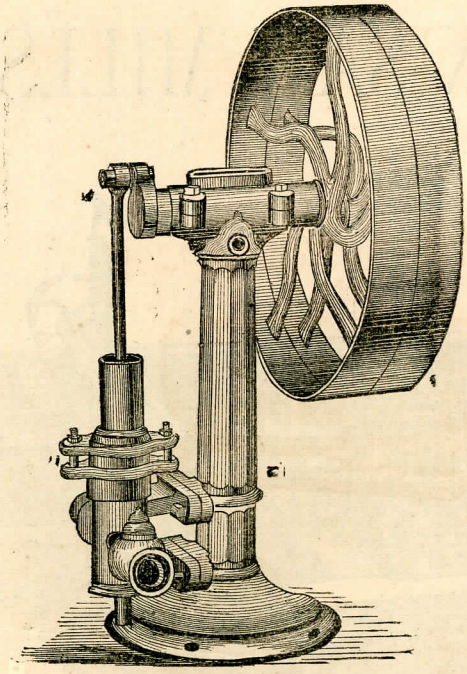

LOCOMOTIVE BOILER WITH OPEN BOTTOM FIRE BOX.
LOCOMOTIVE BOILER WITH WATER BOTTOM FIRE BOX.
PLAIN CYLINDER BOILER
UPRIGHT BOILER.
RETURN FLUE BOILER
RETURN TUBULAR BOILER.

The above engraving represents the various styles of Boilers we build, all of which are of the best materials and workmanship, and proportioned to give the best results.

We furnish Stacks, Tanks, Grate-Bars, and all kinds of Boiler Work and Fittings.

REPAIRING PROMPTLY DONE.

[PLATE 14.]



POWER and HAND PUMPS.

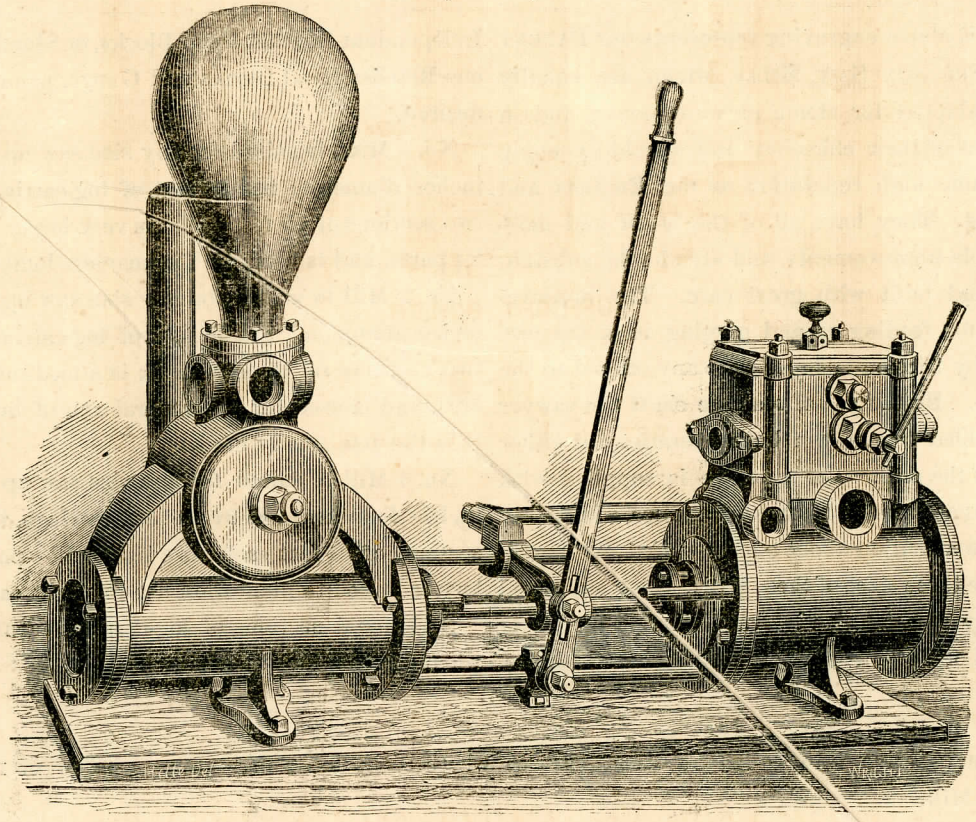
PLATE 14 represents our DETACHED BOILER FEED PUMP, which may be worked by hand or driven by power. It is used for lifting water from wells and feeding direct into boilers, or putting it into tanks, from which it can be drawn by the engine-pump. If the well is shallow, the Pump is used as shown in engraving; but for deep wells the Pump is detached and placed down the well, and the connecting rod lengthened to suit.

We also furnish PLAIN HAND PUMPS for supplying tanks or filling up boilers.

INDEPENDENT STEAM PUMPS

[PLATE 15.]

ANY REQUIRED CAPACITY FURNISHED.

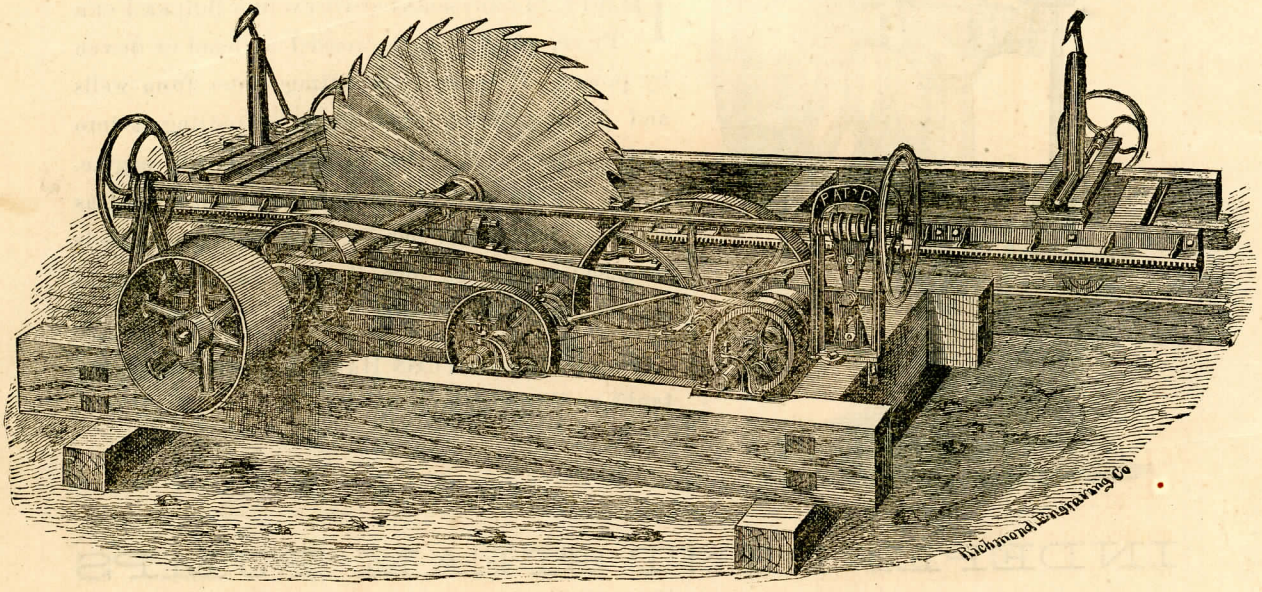


MOST RELIABLE STEAM PUMP KNOWN.

The above engraving represents an INDEPENDENT STEAM PUMP for feeding boilers, supplying tanks, factories, water works, &c., requiring large quantities of water.

PATENT FRICTION SAW MILLS

[PLATE 16.]



THE above engraving represents our PATENT FRICTION SAW MILLS, which are equally well adapted for steam or water-power, and on account of their efficiency and durability enjoy the same high reputation as our Engines and Boilers. They have all of the latest and most valuable improvements, and are simple, substantial, and built with great care. The improvement for feeding up and gigging back the carriage by friction is superior to any offered to the public. By the use of a single shaft the sawyer is enabled to perform both operations at either end of the mill. The carriage is supplied with our IMPROVED SELF-OILING ROLLERS, which only require attention about once a week. We manufacture three sizes of these Mills, which are suited for any size saw, and furnish them with either Chisel or Solid-Tooth Saws, Screw Head-Blocks, Independent Ratchet Head-Blocks, or Simultaneous Ratchet Head-Blocks and Gauge, as may be desired.

No. 1 MILL is suited for any size saw up to 60 inches diameter; has 30 feet of log-carriage, in two sections of 15 feet each; is very heavy in all its parts, and is used for the heaviest lumber.

No. 2 Mill is suited for any size saw up to 54 inches diameter; has 30 feet of log-carriage, in two sections of 15 feet each; is a medium size Mill, and is used for the general run of lumber. It is the size mostly used.

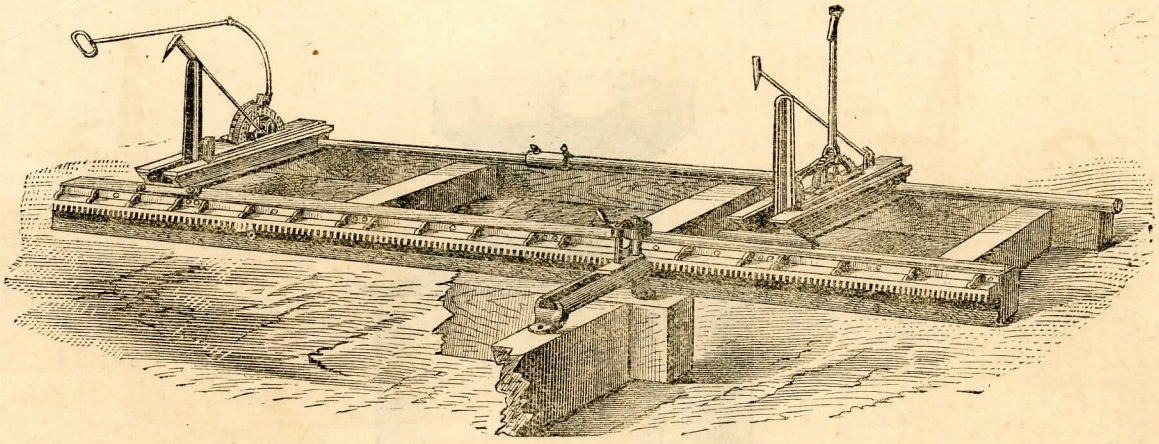
No. 3 Mill is suited for any size saw up to 48 inches diameter; has 24 feet log-carriage, in two sections of 12 feet each; is a light mill—particularly adapted to plantation use for light sawing.

Additional sections of log-carriage furnished, when desired, for either mill.

In ordering Saw Mills, be careful to see whether the location requires a RIGHT or LEFT-HAND Mill.

SIMULTANEOUS RATCHET HEAD-BLOCKS.

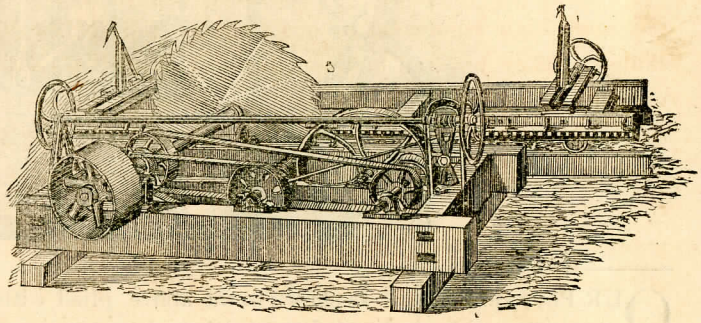
[PLATE 17.]



THE above engraving represents our SIMULTANEOUS RATCHET HEAD-BLOCKS AND GAUGE applied to a section of carriage, and will take the place of the Screw Head-Blocks, as shown in the preceding engraving of Saw Mill. While this arrangement is much more simple than many others, it is equally as efficient, and therefore more desirable. The sawyer can operate the mill and set the log without moving from his position. For accuracy they are unsurpassed, and are a great saving both in labor and time.

RIGHT-HAND SAW MILL.

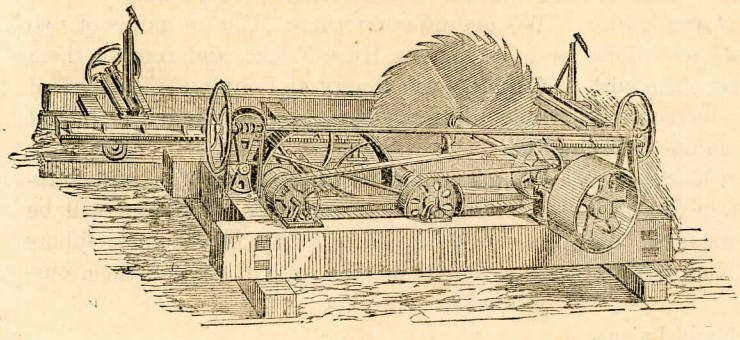
[PLATE 18.]



Mills are designated as either right or left-hand; and to avoid mistakes in ordering, we will state that with engines left-hand mills are generally used; but with water-wheels they are as often right as left, which can only be determined by the location. We will therefore define them as follows:

LEFT-HAND SAW MILL.

[PLATE 19.]



RIGHT-HAND MILL (Plate 18).

When standing in front of the saw, the carriage is to the *right* and the log-yard to the *left.*

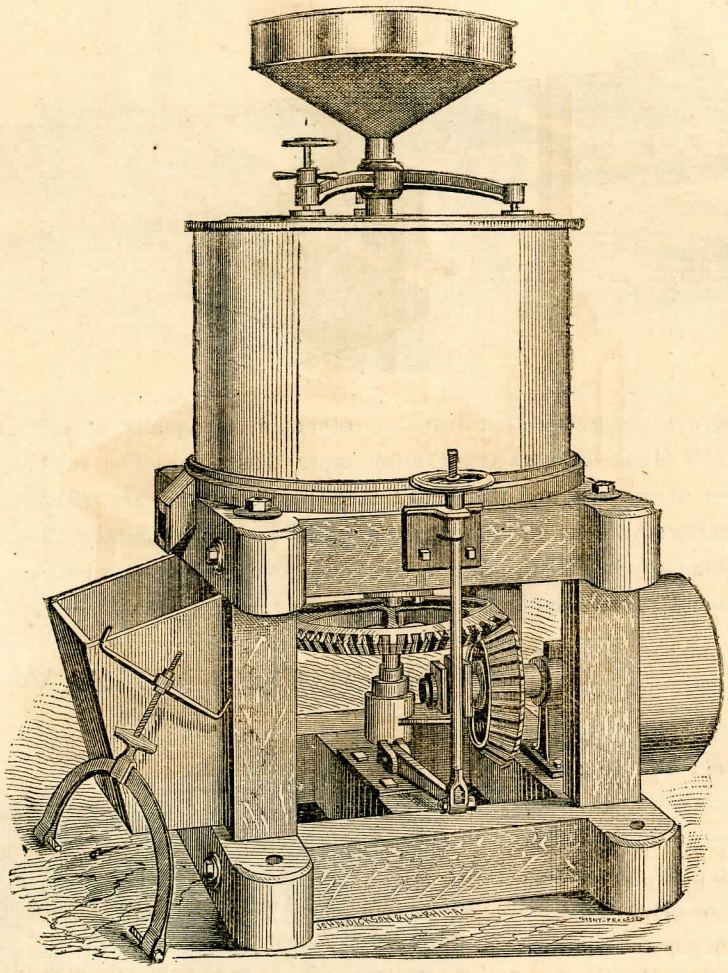
LEFT-HAND MILL (Plate 19).

When standing in front of the saw, the carriage is to the *left* and the log-yard to the *right.*

A RIGHT-HAND MILL is always sent unless otherwise ordered.

PORTABLE
CORN AND WHEAT MILLS.

[PLATE 20.]



OUR PORTABLE MILLS, as shown in the above engraving, are constructed to be driven by steam or water-power. They may be driven either with belts or gearing, as the purchaser may desire or the location require. We manufacture five sizes of these Mills, from 2½ to 4½ feet diameter, varying by 6 inches, and furnish them with either Esopus or Burr Stones, as may be required. They are complete when shipped from our works and can be put in operation in a few hours after they are received. They are built in the most substantial manner, of the best material, and have always given the most unqualified satisfaction wherever they have been used.

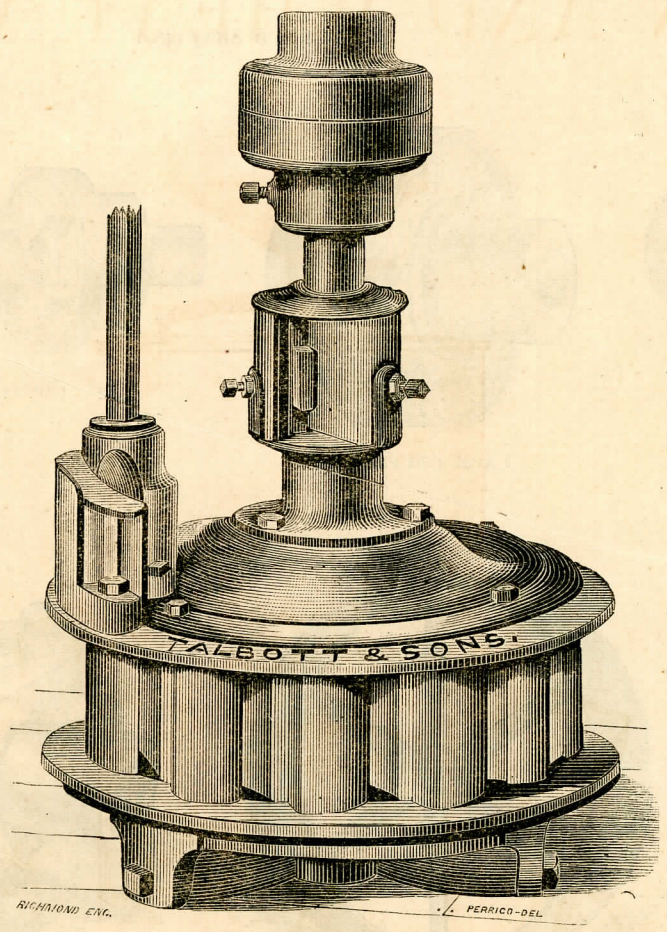
Every saw mill and plantation should be supplied with a good Grist Mill. It can be profitably employed in grinding for the hands and stock at a very small cost, and at times when the regular operations cannot be carried on.

We manufacture these Mills in gangs of two or more in one Husk-Frame, and furnish them with all the machinery and equipments required for first-class and complete custom and merchant mills.

We also manufacture all kinds of Mill Machinery for either steam or water-power, and will be pleased to furnish estimates on receipt of plans and specifications, or we will furnish them ourselves when called for.

CROWELL'S TURBINE WATER WHEEL.

[PLATE 21.]

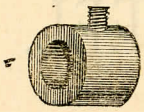


SPECIAL attention is directed to our improved CROWELL TURBINE WATER WHEEL, as shown in the above engraving. This Wheel, for efficiency of power, economy of water, durability and simplicity of construction, is without a superior, and the high results it has produced in ACTUAL USE have established for it that enviable reputation it so justly merits, and given it sufficient guarantee as a motor. Those wishing to improve their water-power would do well to send for our Illustrated and Descriptive Pamphlet and Price List before purchasing elsewhere.

REASONS WHY THE CROWELL WHEEL SHOULD BE USED.

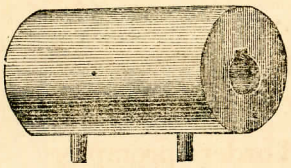
1. It gives as much power at full-gate as any other Wheel using the same quantity of water.
2. It gives more power at fractional gates than any other Wheel using the same quantity of water.
3. It has more motion than any other Wheel of same size and power.
4. The head of water produces no weight upon the step or pivot.
5. There is less leakage than in any other Wheel.
6. It runs perfectly steady.
7. It cannot be frozen up.
8. It is not affected by back-water, save in the loss of head.
9. It uses every inch of the head of water.
10. It is a great economizer of water.
11. It is simple and durable.
12. It is composed of but few working parts.
13. The materials and workmanship are the very best.
14. It is completely finished before leaving our works.

There is no risk in purchasing these Wheels, as in every case we give a satisfactory guarantee when put up and operated according to our instructions.

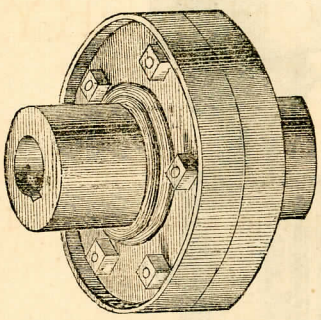


SET COLLAR.

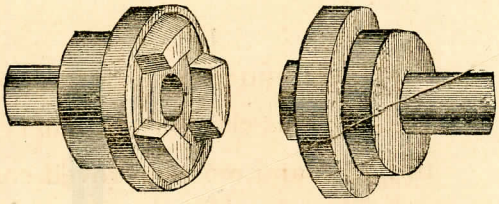
TURNED SHAFTING.



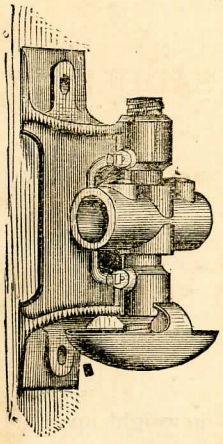
SLEEVE COUPLING.



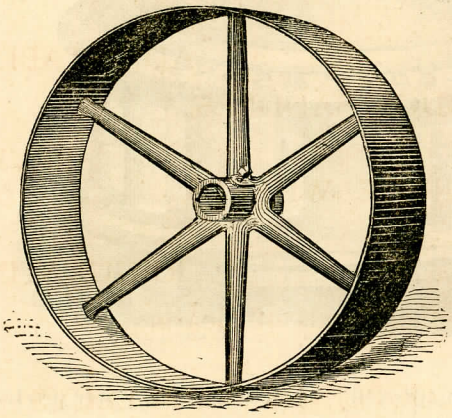
FACE COUPLING.



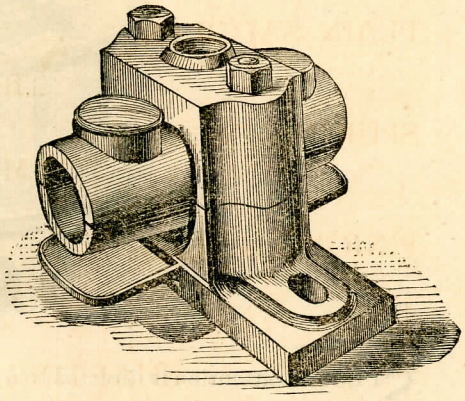
CLUTCH COUPLING.



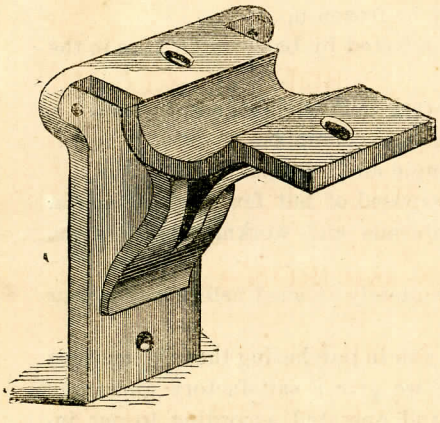
POST HANGER.



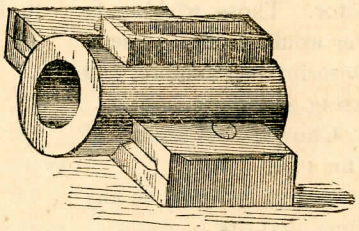
PULLEY.



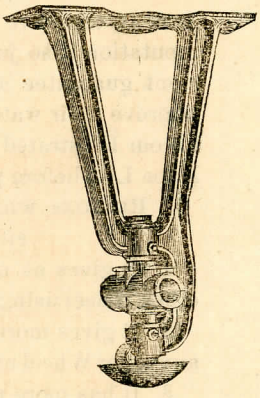
PILLOW BLOCK.



POST BRACKET FOR CLAMP BOX.



CLAMP BOX.



DROP HANGER.

Shafting, Hangers, Couplings,

PULLEYS,

MILL MACHINERY, &c.

Having fitted up a portion of our Works with the most improved and special tools for this class of machinery, together with a large assortment of patterns of the latest and most improved construction, we are prepared to fill orders promptly and at the lowest market rates.

MILL SPINDLES, MILL BUSHES,

BAILS AND SCREWS.

PATENT SELF-ADJUSTING DRIVERS.

PLAIN SADDLES, ADJUSTABLE SADDLES,

BRIDGE SADDLES.

SPUR WHEELS, BEVEL WHEELS,

MORTISE WHEELS,

PINION LIFTERS, REGULATING SCREWS,

and all other kinds of Gearing.

SHAFTING, COUPLINGS AND PULLEYS

of all Diameters and Faces.

PILLOW BLOCKS, PLAIN BOXES,

DROP AND POST HANGERS.

SMUT MACHINES, FLOUR PACKERS, BOLTING CLOTH,

ELEVATOR CUPS, BELTING,

BURR MILL STONES, ÆSOPUS MILL STONES.

WROUGHT-IRON WORK, BRASS AND IRON CASTINGS.

MACHINERY FOR CORN AND FLOUR MILLS, &c., &c.

Plans and estimates for complete Merchant and Custom Mills furnished upon application.

TESTIMONIALS.

Below we give a few of the many testimonials we have received as to the character and quality of our work:

DARLINGTON, S. C., Oct. 31, 1878.

The undersigned, judges in the Machinery Department of the Darlington, S. C., Agricultural Society, at their Eighth Annual Exhibition, held this date, have, after a careful examination and comparison, awarded the First Premium for Best Portable Steam Engine, suited for agricultural and general purposes, to the firm of Talbott & Sons, of Richmond, Va. We also decide that their machinery is superior to any yet introduced into our country, and would recommend our citizens to purchase the Talbott Engine.

Signed.

W. E. RHODES, D. LEWIS.
J. G. WINTERS, T. J. GALE,
W. L. HART, *Committee.*

KILGORE, TEXAS, January 20th, 1880.

Messrs. TALBOTT & SONS, Richmond, Va.:

Gentlemen,—* * * I hope to hear from you soon. I can recommend your machinery to them as the very best, and second to none in workmanship—the best Engine in the market for the money. I hope you will send me your prices. Our Mill still holds out all O. C. We cut 8,000 feet every day we run, and this is the *twenty-third* year it has been run. (18-horse power.)

Yours truly, W. P. MARTIN, JR.

WHITTLES, VA., Nov. 13, 1878.

Messrs. TALBOTT & SONS:

Gentlemen,—I gives me great pleasure to say to you that the 20-Horse Power Engine bought of you last February gives entire satisfaction. I commenced sawing the first of March, and have run it steadily ever since that time; can easily cut 7,000 to 8,000 feet per day, and it does as good work to-day as it did the first day I started it. I have no hesitancy in recommending it as being the best Engine I have ever seen in use.

Very truly, G. H. VADEN.

CONCORD, N. C., Sept. 15, 1878.

Messrs. TALBOTT & SONS:

Dear Sirs,—The 20-Horse Power Portable Engine and Boiler bought of you has proven as represented in every respect. It has been in almostconstant use cutting lumber, shingles, laths, &c., and ginning and packing about 300 bales of cotton a year. It has never been any trouble to us yet, always steaming free and easy, and working satisfactorily. While there are other good Engines, yet the "Talbott," in our opinion, is the safest and easiest managed under all circumstances of any we have ever seen. An experienced hand can, in a few days, run it about as well as an experienced engineer. For durability, ease of management and economy, we do not think the "Talbott Engine" can be excelled. Our Engine has been running almost regularly now for nearly two years, and does not show the least sign yet of wear in any of its working parts, and has never yet cost us a single five cents for repairs. To all persons who think of running by steam power, we unhesitatingly recommend the "Talbott," feeling assured that no one will ever regret buying an Engine manufactured by Talbott & Sons.

Wishing success to you, we remain,

Yours truly,
A. F. HILEMAN & BROS.

GREENVILLE, S. C., Nov. 23, 1879.

Messrs. TALBOTT & SONS:

Dear Sirs,—The 7-horse power Planter Engine bought of you drives my 60-gin to my entire satisfaction. I know too little of machinery to write of its comparative merits with other Engines; but my engineer, who has had considerable experience, is enthusiastic in its praise.

Very respectfully, W. C. CLEVELAND.

CONCORD, N. C., Dec. 1, 1879.

Messrs. TALBOTT & SONS:

Dear Sirs,—The 9-Horse Power Planter Engine I bought from you has given entire satisfaction. It has done better than you recommended it to do, driving a 60 saw gin and press, with all ease, ginning a bale per hour. I have not been delayed a moment from any cause, since starting, while two of my neighbors, one using a —— and the other a —— Engine, have had numerous breakdowns and delays.

Yours respectfully, A. M. COOK.

WAKE CO., Nov. 18, 1878.

Messrs. TALBOTT & SONS:

Gentlemen,—The Saw Mill bought of you several years ago has given entire satisfaction. It is running to-day, and has been running regularly since we bought it, and will cut 10,000 feet of lumber in ten hours. It will cut as much now as when first put down. The boiler is as good as it was when it left your shop, and is easily steamed. The Engine is simple and runs beautifully. We consider your saw frame, carriage, &c., complete. Our expense for repairs have been almost nothing. We have used several different kinds of Saw Mills, but we consider the one bought of you far superior to any we have ever used, and take pleasure in recommending it to any one who wishes to buy. Our Mill is only 25-horse power, but we consider it sufficient to cut all the timber we can get to it.

Very respectfully, yours,
C. F. & P. W. DOWD.

PLEASANT VALLEY, S. C., Oct. 2, 1878.

Messrs. TALBOTT & SONS;

Dear Sirs.—We have been using the 8-Horse Power "Standard" Engine purchased from you in June, 1877, for threshing and ginning until two months ago, when we attached one of your No. 3 Saw Mills. It has performed its work to our entire satisfaction, and we cannot say too much in praise of the machinery. We are now sawing, with ease, 3,000 *feet* of lumber per day.

Yours truly, HYATT & ROANE.

MATHEWS, N. C., Oct. 15, 1878.

Messrs. TALBOTT & SONS:

Dear Sirs,—I do not think that a better Engine of the same capacity could be put up. My Engine is a 9-horse power Planter. We now run a 48-inch saw, and cut from 2,500 to 3,000 feet of lumber per day. We can gin eight bales of cotton, and drive the Cotton Press at same time with ease. The Engine has been in operation since the 1st September, 1877.

Yours truly, D. M. FESPERMAN.

YORKVILLE, S. C., Sept. 25, 1878.

Messrs. TALBOTT & SONS:

Gents,—I purchased last season one of your 7-Horse Power Planter Engines, and am pleased to say that it has given entire satisfaction, giving abundance of power to drive a 50 Saw Gin. It runs smoothly, uses but little wood, and is easily operated.

Yours truly, ROBERT BLACK.

RICHMOND, April, 1871.

Messrs. TALBOTT & SONS:

Gentlemen,—I desire to express my opinion in regard to your Hydraulic Pumps, Retainer, and Engine by which

steam is applied to these. It gives me pleasure to say that I am much pleased with these fixtures, and I would commend them to all manufacturers of tobacco who desire to work with ease and economy. The combination by which steam-power is applied to the Pumps, is in itself a simple and beautiful design, and operate to my perfect delight. I have been using these fixtures now about a year, and find myself unable to suggest any change wherein would consist any improvement. All the commendation that is needed for any one to be persuaded of the excellence of your fixtures is to see them while working. Yours truly,

JAMES LEIGH JONES.

CLOVER, S. C., Dec. 4, 1879.

Messrs. TALBOTT & SONS:

Dear Sirs,—The 7-Horse Power Planter Engine bought of you this fall has proven entirely satisfactory. We have ginned 300 bales of cotton with a 60-Saw Gin, and have ginned as much as 12 bales per day. We would not exchange our Engine for any other make in the market. Our engineer says the capacity of our Engine is sufficient to drive two 50-Saw Gins.

Yours truly, ROBINSON & LAURENCE.

GOLDSBORO, N. C.

Messrs. TALBOTT & SONS:

The Engine and Saw Mill (20-Horse Power) purchased of you three years ago has been at work ever since, and gives complete satisfaction in every respect. I cheerfully and without hesitation pronounce it the best Engine and Saw Mill in the *world* to its capacity.

Respectfully yours, BERRY A. PARKS.

FORT MILLS, S. C., Oct. 1, 1878.

Messrs. TALBOTT & SONS:

Dear Sirs,—The 9-Horse Power Planter Engine purchased from you this season has performed admirably. We are driving a 50-Saw Gin with 40 pounds steam, and turn out nine bales, weighing 500 pounds each, per day. I have never had any experience with steam-power, but have had no difficulty in the management of the Planter Engine. I cheerfully recommend any in want of engines to purchase from you.

Yours respectfully, L. N. CULP.

FORT MILLS, S. C., April 1, 1879.

Messrs. TALBOTT & SONS:

Last week the little 9-Horse Power "Planter" Engine and Saw Mill cut 18,000 feet of lumber. We commenced the week's work at 1 o'clock P. M., on Monday, and the balance of the week did not get to work before 7½ o'clock in the morning.

Yours, etc., L. N. CULP.

CHARLOTTESVILLE, VA., March, 1871.

Messrs. TALBOTT & SONS:

Gentlemen,—It gives me great pleasure to say to you that the Engine and Saw Mill last bought of you, in February, gives entire satisfaction. I have bought and operated a large number of your Engines and Saw Mills, and always with entire satisfaction; but the last seems always the best. I have one of your old pattern, made in 1852, which is now doing its work well, and the boiler appears to be as good to-day as it was seventeen years ago (the time I bought it). I cheerfully recommend your machinery to all who may wish to purchase.

Yours respectfully, M. A. CARROLL.

OLD HUNDRED, N. C., March 11, 1879.

W. C. MORGAN, ESQ., Charlotte, N. C.:

Dear Sir,—We have been using Talbott & Sons' Engine for more than a year, and we take pleasure in testifying to its good qualities. For ease of movement and durability, we do not know its equal. There are a good many used in this section, and we think all that own them will cheerfully testify the same.

Very respectfully,

JNO. S. FLETCHER & SONS.

PATES, ROBESON CO., N. C., Nov. 24, 1879.

Messrs. TALBOTT & SONS:

Dear Sirs,—I like the 12-Horse Power Planter Engine very much. It works splendidly.

Yours truly, O. S. HUGES.

LAURINBURGH, N. C., Nov. 24. 1879.

Messrs. TALBOTT & SONS:

Dear Sirs,—The 20-Horse Power Engine and Saw Mill purchased from you gives entire satisfaction, and has proven to be all that you have claimed for it; and in respect to quality, simplicity, durability and ease of management, I know that it cannot be excelled by any other make that I am familiar with. Any ordinary twelve-year-old boy can manage one of them.

Respectfully yours, T. B. GIBSON.

YORKVILLE, S. C., Nov. 24, 1879.

Messrs. TALBOTT & SONS:

Dear Sirs,—I am very much pleased with the 12-Horse Power Planter Engine. I used one of the 7-Horse Power Planter Engines two seasons, and disposed of it on account of being too light for sawing. I never knew Engines to do their work any better; in fact, I regard your Engines superior to any other used in this locality.

Yours truly, BOBT. BLACK.

WILSON'S MILLS, N. C., April, 1871.

Messrs. TALBOTT & SONS:

Gentlemen,—I have been using your Engines, Saw and Grist Mills for more than twenty years, and have seen a great many others in operation, but yours *excel* any I have ever seen. I have four Engines and one Grist Mill now in operation, all of your make. I cheerfully recommend your machinery generally to the public as being the best I have ever seen.

Yours respectfully, JNO. M. WILSON.

CARY, N. C., March 29, 1879.

Messrs. TALBOTT & SONS:

Gents,—The 15-Horse Power Engine and Saw Mill we bought of you in 1875, has given entire satisfaction, cutting as much as 8,000 feet of lumber per day with it.

The 30-Horse Power Engine and Mill bought last month has been running about two weeks, and we are confident it will cut 1,000 feet of lumber per hour through the day. In our experience, your Pumps are *perfect.* We have been using one of them regularly for the last four years (on the 15-Horse Power), and it has not been the least out of order, and consequently has never cost us one cent. This of itself is a great saving to lumbermen operating so far from machine shops.

Yours very respectfully, GUESS & PAGE.

WALHALLA, S. C., Nov. 22, 1879.

Messrs TALBOTT & SONS·

Dear Sirs,—With the 10-Horse Power Engine bought from you last July, I have ginned 336 bales of cotton, running a 70-Saw Gin and Power Press at the same time, with 50 pounds steam. The engineer never knows when the Press is running. The Engine has not cost me a cent for repairs, and I can cheerfully recommend it as being a *captain* in comparison with the other make of engines which I have examined.

Yours truly, W. A. STROTHER.

SOUTH RIVER, N. C., Dec. 22, 1879.

Messrs. TALBOTT & SONS:

Dear Sirs,—As the ginning season is about over, I desire to say the 12-Horse Power Planter Engine purchased from you has given *entire satisfaction.*

Respectfully yours, A. L. HALL.

MOTLEY DEPOT, VA., Oct. 8, 1878.

Messrs. TALBOTT & SONS:

Gentlemen,—It has been my intention for some months to write you in regard to the Eighteen-Horse Power Engine and Mill purchased of you last May, and after a conversation with my sawyer, who has had a great deal of

experience in the lumber business, and who fully concurs with me in all I have to say, I have at last, in justice to you and a public who are constantly buying such things, determined to write. Its capacity is only come at by my ability to haul logs. I believe it will cut nine to ten thousand feet any named day, and runs with less trouble and expense than any Mill I have ever seen. To say that I am pleased with it, falls far below its real merit. It is decidedly the best in the market. I live in a lumber country where there are many Mills, but this far surpasses even the largest size Mills As my sawyer remarked yesterday to a neighboring sawyer, he had all the power he wanted. I will gladly exchange my Engine of —— make (estimated Twenty-five Horse Power) for one of your Eighteen-Horse Power, and if you say so it is a trade. Persons wanting Mills cannot do better than to buy of you, for there is, in my opinion, no Mill in the market with more strength per estimated horse power, more simple and durable than yours. I am much pleased with the whole outfit. If this letter can be of service to you, you are at liberty to publish it in whole or part, as you may think best. I hope you may prosper, and always be ready to furnish such machinery as I purchased; then no Southern man can in justice to himself go to the North or anywhere else to purchase machinery, as yours is, in my humble opinion, worth even more than your price for it. I know I have written strong language, but I feel all I say, and hope you will refer any one in want of machinery to me, and I will gladly prove all I say. I have been in the business nine years, and know of what I speak. Yours truly, A. C. BECKHAM.

SNOW HILL, N. C., Aug. 21, 1879.

Messrs. TALBOTT & SONS:

Gents,—The 20-Horse Power Engine and Improved Saw Mill with Ratchet Head Block purchased of you in August, 1877, has come fully up to your recommendation and has given entire satisfaction.

Yours respectfully, PATRICK & HANDY.

LAKE PROVIDENCE, LA.

Messrs. TALBOTT & SONS:

Gentlemen,—I am highly pleased with the present performance of the Engine and Saw Mill, and am still confident, as I assured you before, that your Engine, on account of its simplicity, power and durability, will supersede all others now in use for running gin shafting, &c. Yours truly,

GEO. C. WADDILL.

N. B.—My brother, Dr. A. M. Waddill, begs me to add that he entertains the same opinion in regard to your Saw Mills that I do. G. C. W.

NEW DANVILLE, RUSK CO., TEXAS.

Messrs. TALBOTT & SONS:

Gentlemen,—We have in operation the 6-Horse Engine you sold Mr. A. K. Webster, and we have cut in one day over twenty-five hundred feet of lumber (board measure), and the Engine is attached to a heavy second class Saw Mill, which is entirely too heavy for so small an Engine. Now such work as this makes us doubly anxious to get our own machinery, so that we could have sufficient power to drive a saw through large timber and as fast as we choose. You will please write us by return mail the precise time that we may expect the machinery at New Orleans. Yours respectfully,

J. M. & W. W. THOMPSON.

LAKE PROVIDENCE, LA.

Messrs. TALBOTT:

Gentlemen,—The Engine, Saw Mill and Gin Machinery with which you furnished me last spring have thus far performed well. I have been engaged in ginning cotton for many years, and have had three different kinds of engines. I prefer yours to any I have had before. It is more portable, costs less to set it up, and consumes less fuel in proportion to its power than any other with which I am acquainted.

Yours truly, EDWARD SPARROW.

WINSTON, N. C., Oct., 1878.

Messrs. TALBOTT & SONS:

Dear Sirs,—We cannot refrain from expressing our pleasure at the running and working of all the machinery you fitted up for us last spring. The Thirty-Horse Power Boiler is amply sufficient for running Engine, two licorice boilers, three drying-rooms, and warming up the entire building, which requires nearly 3,000 feet of one-inch pipe, and only consumes about one cord of wood per day. The Twenty-Horse Power Engine is a model of good workmanship, simplicity and beauty; in fact, it is the prettiest moving thing, except a pretty woman, you ever saw, and drives one large plug machine, and one hydraulic power pump, one large planer, one cut-off and one rip saw, and will drive three times this amount of machinery without a halt or murmur, and makes less noise than many foot-treadle sewing machines. The line of eight hydraulic shape presses and four pot presses, all run by power pump, and line of sixteen box presses, cannot be excelled for uniformity and excellence of make-up and fit; and all have been running nearly an entire season without one cent of cost by way of repairs. Our Mr. Locket says we will have to extend our line of shape and box presses next season.

Very respectfully, BROWN & BROTHER.

GOLDSBORO', N. C., March 27th, 1871.

Messrs. TALBOTT & SONS, Richmond, Va.:

Gentlemen,—It gives me great pleasure to inform you that the Thirty-Horse Power Engine and Saw Mill recently purchased of you through Albert Day, Esq., of this place, performs to my entire satisfaction, and I have no hesitation in saying it is a first class piece of machinery in every respect. I sincerely hope you may make many sales, for I can confidently say, in workmanship and simplicity, your Engines, &c., have no superior in this country.

Very truly yours, WM. T. DORTCH.

LAKE PROVIDENCE, LA.

Messrs. TALBOTT:

Gentlemen,—I have in use one of your Steam Engines and Circular Saw Mills, which performs to my entire satisfaction—well managed, cutting from 7,000 to 8,000 feet per day, and have no hesitation in recommending it as the best mill for plantation use yet offered to this country.

SAM'L L. CHAMBLISS.

LODORE, AMELIA CO., VA.

Messrs. TALBOTT:

Gentlemen,—The Twenty-Horse Power Engine and Saw Mill we purchased of you works like a clock, and we are well satisfied with it. In fact, we never saw a Mill that worked better, and we would advise all our friends that would like to get an Engine and Saw Mill, to get them of you, as we feel satisfied that your work will always come up to what you say for it.

Yours respectfully, BRAZEAL & JOHNSON.

HENRICO CO., VA., April, 1871.

Messrs. TALBOTT & SONS, Richmond, Va.:

Gentlemen,—We desire to say to you that the Engines and Saw Mills of your manufacture, we are now running, gives us the most entire satisfaction. They cannot be excelled, and we never have any trouble with them. We have seen a great many engines and mills of both Northern and Southern make, but those made by you are beyond a doubt the most perfect and complete of any we ever saw. They are extremely simple, compact and durable, and the workmanship is of the best kind. We most cordially recommend your machinery to our Southern people as being all they could desire, and in all respects superior to those of Northern manufacture.

Yours respectfully, M. F. ALLEN & BRO.

ROCKINGHAM, N. C., Dec. 15, 1879.

Messrs. TALBOTT & SONS:

Gentlemen,—We can truthfully say that the 9-Horse Power Planter Engine bought of you has given entire

satisfaction. It is very easily managed; we had no trouble whatever in running it. It will drive our 40-saw Gin with 25 pounds steam, and turn out 6 bales of cotton per day. We can also saw 3,000 feet of lumber per day. It does more than you claimed, and we believe that it is the best Engine made.

Yours respectfully, T. J. & W. W. BOSTICK.

SPARTANSBURG, S. C., Nov. 26, 1879.

Messrs. TALBOTT & SONS:

The 9-Horse Power Planter Engine and Saw Mill purchased from you last July is doing finely. For the first two months I ran the Mill, sawing from 2500 to 3000 feet of lumber per day. Since then I have been ginning with a 60-Saw Gin, and putting up from 7 to 10 bales of cotton per day. I have not paid out *one cent* for repairs since it started last July. I think that I have the best Engine made, and would not exchange for any of other make that I have seen.

Yours respectfully, D. A. SWITZER.

MOHAWK, MISS.

Messrs. TALBOTT:

Gentlemen,—I write to say that the Engine and other machinery put up for me on this place, by Mr. I. Herring, has proved entirely satisfactory. In fact, all the articles from your factory seem to me to be of the very best. The Grist Mill I think superior to anything I have seen in this country. The Engine and Saw Mill, I think, have given satisfaction wherever I have heard them spoken of.

Very truly, P. B. STARKE.

CARTER'S MILLS, TEXAS.

Messrs. TALBOTT:

Gentlemen,—I lately bought one of your Engines and Mills, which has just been put up by Mr. Starr, and write to state that I am well pleased with its performance, and believe it to be the best now made for plantation purposes, and recommend it to all those who may be in need of steam-power.

Yours respectfully, J. J. CARTER.

HENRICO CO., VA., March 15th, 1879.

Messrs. TALBOTT & SONS:

Gents,—The three Engines purchased of you at different times in the last six years are all rendering satisfactory service to me to the present day. For simplicity and general adaptation to all kinds of work on the plantation, they cannot be excelled. I have never employed other than the ordinary plantation hands in operating any of them, and yet have had in constant operation my Saw and Grist Mill. With the Eight-Horse Engine on wheels, intended principally for driving threshing machines (before the Twelve-Horse Engine arrived), I frequently sawed 3,500 feet of lumber per day, and that, too, while using the green slabs in part for fuel. I have seen the Engines of several other makers in use, but none of them so simple and easy of management as those put up by you.

Very respectfully yours, GRAY SKIPWITH.

WELFORD S. C., Oct. 15, 1879.

Messrs. TALBOTT & SONS:

Dear Sirs,—Our machinery works all right. The Engine (5-horse power) does more than was recommended. It drives the Gin and Press with 50 pounds steam; runs both at the same time. Yours respectfully,

WESTMORELAND & DE BARD.

BREWERTON, S. C., Sept. 15th, 1878.

Messrs. TALBOTT & SONS:

Dear Sirs,—The 7-Horse Power Planter Engine we purchased of you in June, 1877, has given unrivalled satisfaction. For its power, simplicity and beauty of action, we think it has no equal. We have threshed a great deal of grain; ginned 350 bushels of cotton last winter with it, and have not had the least trouble with the Engine. We gin eight bales per day (weighing 450 pounds per bale), using forty pounds steam to drive the gin, and have threshed sixty bushels of wheat in sixty minutes with the No. 1 Sweepstake Thresher, with forty pounds steam. We do not hesitate to say that the "Planter" Engine is the best piece of machinery of its class we ever saw, and would recommend them to any one wanting steam power.

Yours truly, KNIGHT & BALENTINE.

MATHEWS STATION, N. C., Sept. 28, 1878.

Messrs. TALBOTT & SONS:

Gents.—The 8-Horse Power "Standard" Engine purchased in the fall of 1877 has given entire satisfaction, driving a 60-Saw Gin with from forty to sixty pounds steam. I have never employed an experienced engineer, and have no difficulty in keeping it in good running order. My son (11 years of age) acts as engineer. I cheerfully recommend any in want of steam-power to purchase of you.

Yours truly, J. B. WILLIAMSON.

GREENVILLE, S. C., Nov. 27, 1879.

Messrs. TALBOTT & SONS:

Gentlemen,—I take pleasure in saying that I have been operating one of your 15-Horse Power Standard Engines bought of you in August last. It has done good work without any expense or trouble whatever. I would not exchange for any other make.

Respectfully, ALEX. McBEE.

RUDY CREEK, S. C., Dec. 4, 1879.

Messrs. TALBOTT & SONS:

Gentlemen,—The 8-Horse Power Standard Engine bought of you cannot be surpassed by any Engine that I have seen. It consumes but little fuel, steams well, and gives entire satisfaction.

Yours respectfully, E. C. SHREWSBURY.

ALFORDSVILLE, N. C., March 4th, 1879.

W. C. MORGAN, ESQ.:

Dear Sir,—The 5-Horse Power "Talbott" Engine I bought of you in 1876 is all that you claimed for it, and has given entire satisfaction. I would not give it for any engine of the same size I ever saw, and can cheerfully recommend it to any one wishing to buy.

Yours truly, CHAS. McRAE.

DUBLIN, VA., Sept. 21st, 1877.

Messrs. TALBOTT & SONS, Richmond, Va.:

Gents, * * * * The Engine and Saw Mill I purchased of you (12-Horse Power) are the best specimens of machinery I ever saw. I have cut over 100,000 feet of lumber with it, and an experienced engineer told me last week—after making a thorough examination of it—that it was worth just as much as it was the day I bought it. I have been running it myself, with a boy to fire it, and neither of us ever ran an engine a day before we got this one.

Yours truly, H. B. HOWE.

WAYNE CO., N. C.

Messrs. TALBOTT & SONS:

Gents,—I now own an Engine purchased of Talbott & Brother in 1859, by W. K. Lane, of this county (15-horse Power), and has been in active use ever since for sawing, running grist mill and cotton gin. Very little repairs have been put upon it, and now doing its work well, running both corn and flour mills and gin, and is considered one of the best engines in this section, of its power.

Respectfully, JOHN R. SMITH.

LONG CREEK, MECKLENBURG CO., N. C.,
December 29th, 1879.

Messrs. TALBOTT & SONS:

Gentlemen,—We have tested the 9-Horse Power Engine bought from you in October last, and find it fully up to all you claim for it. We ran a 60-Saw Gin with it for about two months, and are satisfied we can run two with the same fuel without any trouble or strain to the

Engine, and cheerfully recommend the Talbott Engine to all persons wanting to use steam-power.

Yours truly, GLUYAS McCOY & CO.

ROCK HILL, S. C., Oct. 4, 1879.

Messrs. TALBOTT & SONS:

Dear Sirs,—I am highly pleased with the 7-Horse Power Planter Engine, having ginned and packed with the engine, 60-saw Winship gin and Boss press 26 bales of cotton in two days. To simply say that I am pleased does not express my appreciation, for having used and been obliged to return an 8-horse Liddell engine, I find that your 7-horse power does the work with less steam and more ease. I cheerfully recommend those in want of steam power to buy only the Talbott engine.

I am, yours respectfully, HENRY MASSEY.

ROCKINGHAM, N. C., Nov. 20th, 1879.

Messrs. TALBOTT & SONS, Richmond, Va.:

Dear Sirs,—The 8-Horse Power Standard Engine bought of you has given entire satisfaction. We can with a 50-saw gin put up 8 bales of cotton per day, weighing 500 pounds each.

Yours respectfully, W. J. EVERETT.

OLD HUNDRED, RICHMOND Co., N. C., March 6, 1879.

Messrs. TALBOTT & SONS:

Gentlemen,—The 9-Horse Engine I purchased of you last fall comes fully up to what you recommended and I expected. I am entirely satisfied with it. I am now sawing with it, running a 40-inch circular saw, and can saw from 3000 to 4000 feet of inch-board per day. Can readily recommend your work to any one.

Respectfully, M. D. McNIELL.

GEORGE'S STATION, S. C., Nov. 25th, 1879.

Messrs. TALBOTT & SONS, Richmond, Va.:

Dear Sirs,—The 12-Horse Power Planter Engine purchased from you has given entire satisfaction. It keeps in perfect order, runs smooth, and makes steam well with little wood. From our experience we believe it to be the best make engine in the market. It is all that has been recommended, and engineers from different parts are loud in its praise.

Yours truly, G. A. T. JOHNSTON & CO.

WILMINGTON CORN MEAL AND FLOUR MILLS, WILMINGTON, N. C., June 8th, 1876.

Messrs. TALBOTT & SONS, Richmond, Va.:

Gents,—Doubtless you have thought strange at my not making complaint before this in regard to the Engine, Boiler, Mills, &c. You must excuse me for not complaining sooner, but I have, in fact, had no cause. I have been looking *closely* to find some cause for complaint, but not being able to do so. I have concluded to write and inform you that the work has proven very satisfactory.

Yours, very respectfully, W. P. OLDHAM.

FEBRUARY 26TH, 1879.

Messrs. TALBOTT & SONS:

Gents,—We are highly pleased with the Engine and Boiler you furnished us in December, 1875. They have been in steady use all the time since, and we have never had any cause for complaint.

Yours, very respectfully, W. P. OLDHAM.

CARY, N. C., Feb. 25th, 1879.

Messrs. TALBOTT & SONS:

Gents,—The Engine and Mill bought of you (18-Horse Power) works to our entire satisfaction. It is fully up to your representations.

Yours respectfully, A. H. PAGE & CO.

SALTVILLE, VA., Oct. 7th, 1878.

Messrs. TALBOTT & SONS:

Dear Sirs,—It gives me pleasure to state that I have been using two of your 8-Horse Power Engines for the past three years (one of them is mounted on wheels), cooking food for my cattle during the winter, with perfect satisfaction. I have not expended one dollar on them for repairs, and they seem to be as good as new. One of them will run a McDonald Corn Mill which will grind twelve bushels of ears of corn into fine meal per hour, and a Fodder Cutter to cut corn-stalks for 150 cattle, and cook it nicely, per day. In my opinion, every farmer who winters one hundred or more cattle should have an engine and grind his corn in the ears, and cook his food for them. I think that I can satisfy any one, who will visit me during the feeding season, that I am correct. With the 12-Horse Power Engine which we bought of you we grind and crush one ton of plaster per hour very fine, using one of the large size McDonald Mills, giving perfect satisfaction.

Yours truly, GEORGE W. PALMER.

BENNETTSVILLE, S. C., March 12th, 1879.

Messrs. TALBOTT & SONS:

Dear Sirs,—I have now been using one of your "Standard" Eight-Horse Power Engines for two seasons—ginning in that time near nine hundred bales of cotton. There is no lost motion, and there has been no breakages. It now seems to be in as good order as when first started. Although inexperienced in the use of steam-power, I have encountered no difficulty; therefore can cheerfully recommend your Engines as being superior to any in our country.

I am, yours respectfully, A. W. MOORE.

RICHMOND, VA., April 7th, 1878.

Messrs. TALBOTT & SONS:

Gents,—The 7-Horse Power Engine and Boiler we purchased of you for our printing office has more than met our expectations. It is placed on the same floor with our presses, and can scarcely be heard when at work. It drives six printing presses—two of them very large, besides heating an office of two floors (large rooms). The Engine is easily attended to, gets up steam rapidly, and answers promptly when a call is made on it for power. In making the change from the Engine formerly used, we have a saving of at least one-half in fuel.

Yours respectfully, J. W. FERGUSSON & SON.

LANCASTER C. H., S. C., Sept. 18th, 1878.

Messrs. TALBOTT & SONS:

Dear Sirs,—The 6-Horse Power Engine I purchased of you two years ago has given perfect satisfaction. It will run a 50-Saw Gin and pack a 500-pound bale of cotton on a power press at the same time, with ease.

Respectfully yours, W. J. McILWAIN.

NEW RIVER DEPOT, VA., Oct. 24, 1878.

Messrs. TALBOTT & SONS, Richmond, Va.:

Gents,—I take great pleasure in saying that the 12-Horse Power Engine and Saw Mill I bought of you in July, 1877, has given entire satisfaction. I consider it the simplest and most complete of any make of engines. A ten-year old boy can be made to understand it in twenty-four hours. On account of the simplicity and compactness, the wear and tear is much less than in other engines. I have not been to a particle of expense in keeping it running, and I look upon my Engine to-day to be as good as new—having never bought a single extra for it. I have had some experience with engines, and consider my 12-Horse Power equal to a 14-Horse Power of any other make. I have kept it running most of the time since it was put up, sawing on an average of 4,000 feet of oak lumber per day, besides grinding from 5 to 20 bushels of corn, and the Engine does its work most beautifully, even in the toughest white oak logs, driving a 50-inch saw. I am sorry I cannot do you justice in expressing my satisfaction with the Engine and Saw Mill, but I most heartily recommend your work as *the best*, and would advise those in want of reliable machinery to purchase of you. Wishing you much success,

I am, very truly yours,
ROBERT KIRKWOOD.

CLIO, S. C., April 4th, 1879.

W. C. MORGAN, Esq.:

Dear Sir,—The 18-Horse Power "Talbott" Engine and Saw Mill I purchased from you last fall has proven a success—fully equal the to recommendation you gave of it. I have sawed regularly from 4,000 to 5,000 feet of lumber per day with it with perfect ease, and I am well pleased with it.

Respectfully, LEWIS SPEAR.

KARNAC, MISS.

Messrs. TALBOTT:

Gentlemen,—It affords me pleasure to inform you that Mr. Flannagan has just finished putting up the Engine you sent me, and so far as I am able to judge, it will answer the purpose, and I think better than any machine I have seen.

Respectfully yours, R. C. BALLARD.

WILSON, N. C., April 4th, 1878.

Messrs. TALBOTT & SONS, Richmond, Va.:

Gentlemen,—The Portable Engine and fixtures I purchased of you last fall have given me entire satisfaction. For plantation purposes, the Engines you manufacture are admirably adapted on account of their simplicity and compactness. I put mine up myself, and an ordinary field hand has run it ever since, and, so far as I can see, it runs as smooth and noiseless as it did the day I started it. I gin and pack cotton with mine (a 10-Horse Power) at the same time. I cut and steam feed, thresh grain and grind apples, and could run a small grist mill, shell corn and saw wood. In fact, I can do anything with it that can be done with stationary horse power, *and at not one-half the cost.*

Yours very respectfully, C. BARNES.

RUSK COUNTY, TEXAS.

Messrs. TALBOTT:

Gentlemen,—The 18-Horse-Power Engine and Saw Mill which you shipped us was started, about ten days since, by your agent for this State (Wm. S. Broaddus), and it performed to our most sanguine expectations—cutting a log into inch plank in five minutes and twenty seconds (252 feet), and we have no hesitation in saying that under favorable circumstances we can make an average of 1,000 feet per hour for ten consecutive hours.

Respectfully yours, BROWN & WADE.

LAKE PROVIDENCE, LA.

Messrs. TALBOTT:

Gentlemen,—My Mill landed at Providence on Sunday, was hauled out on Monday, and we put it up and commenced sawing on Friday—thus, in four days, putting a mill in operation, and sawing 1,000 feet per hour. Allow me to hope that these Engines and Mills of yours will find their way into every neighborhood in the South. Being superior to any made in the North, they deserve the patronage of every Southerner wishing an article of that kind.

Yours truly, W. L. KNOX.

RALEIGH, N. C., January 8th, 1879.

Messrs. TALBOTT & SONS:

Dear Sirs,—We take pleasure in saying we have used your Engines for the last four years, and we prefer them to any we have ever seen. We think them superior to any Engine made. We expect to use your make as long as we have anything to do with machinery.

KELLY & PUREFOY.

LOUISA C. H., VA., Nov. 26, 1878.

Messrs. TALBOTT & SONS:

Gents,—It gives us great pleasure to bear testimony to the great superiority of your Engines and Mills. We have been using one of your 22-Horse Power Engines and Mills in constant operation for the past five years, and it is as good to-day as it was when first turned out of your works; there is not a defect or blemish in it. We frequently cut 8,000 to 10,000 feet of lumber per day with perfect ease. For simplicity, durability and efficiency, it cannot be excelled, and we would advise all who need Engines and Mills to purchase of you, as we are confident they cannot do as well elsewhere—your machinery being kept up to that high standard for which it has been for so many years justly celebrated.

Wishing you the success you deserve, we are,

BLUBAUGH & SNOW.

Crowell's Patent Turbine Water Wheel.

WESTPORT, CONN., November 30, 1871.

A. B. CROWELL, Esq.:

I have used your 23-inch Wheel three days, and am agreeably disappointed in the little thing, and my neighbors are more so. It is a powerful thing, and I have no fear of breaking the gate. I drive a trip-hammer, a blower, and a pair of shears with half-gate, and I think it will do all you promised. I am perfectly satisfied with it.

Yours respectfully, BRADLEY HULL.

A 13¼ under 21 feet head driving a single sash Saw Mill.

NORTH BRANCH, MD., January 20, 1872.

A. B. CROWELL, Esq.:

I have placed the 13¼-inch Wheel under head and fall of 21 feet, and find that it gives power to excel an overshot Wheel. I can saw 160 feet of oak per hour. The speed is great, and machinery may be attached with little expense. I think it is one of the best wheels for durability, economy of water, and exemption from ice, and recommend it to all owners of water-power.

Yours, &c., JOHN LEETHALER.

We will apply our wheels to driving any kind of machinery, including tilt-hammers and rolling-mill trains, where the work is so severe on the gate and step—always guaranteeing satisfaction.

COATESVILLE, PENN., January 24, 1872.

A. B. CROWEL, Esq.:

We take great pleasure in saying that the 23-inch Wheel you put in for us last spring, to drive our tilt-hammer of about 2800 pounds, is giving us entire satisfaction, and runs ahead of the calculated speed, requiring us to use a partial gate. We shall be glad to show it to any one wishing to see it at work.

Yours, &c., HUSTON & PENROSE.

NOTE.—This Wheel is working under 14 feet head of water, and was guaranteed to drive a 3000-pound hammer 24 strokes per minute. The hammer is a cast-iron block of about 2800 pounds, but the additional weight of the wooden beam to which it is fastened will make over 3000 pounds weight, which the Wheel drives 33 revolutions with all its additional heavy gearing.

Doing the same work as a Breast-Wheel at one-third gate, with one-half the quantity of water.

GLEN MILLS, CHESTER CO., PA., Feb. 12, 1872.

MR. A. B. CROWELL:

Dear Sir,—The 15½ inch Turbine Wheel has not had more than six weeks' work to do, but during that time has performed well. We do not think it takes more than half the water required by the breast-wheel which formerly did the same work. It is now doing about six-horse power work with not over one third of a full gate.

Yours truly, J. M. WILCOX & SONS.

NOTE.—This Wheel is working under 14 feet head of water. The number of H. P. is somewhat overdrawn by Messrs. Wilcox & Sons; but this goes to show that the Wheel gives a high percentage with one-third gate.

MARIETTA, GA., September 24th, 1875.

MR. A. B CROWELL:

Dear Sir,—I am in receipt of yours of 31st instant, in relation to the two Wheels I bought of you. I can say with pleasure that the Wheels are everything you represented them to be, having done all my work well in every particular; and if there is anything wrong with them I have failed to detect it.

With much respect, your obedient servant,

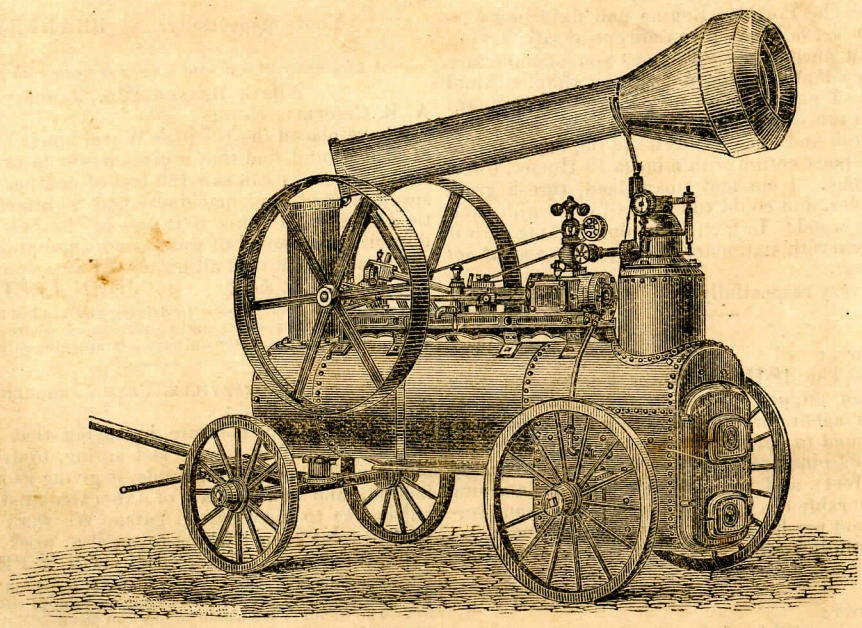
WM. P. ANDERSON.

TALBOTT & SONS,

ENGINEERS, FOUNDERS AND MACHINISTS,

Cary and Seventeenth Streets,

RICHMOND, VIRGINIA.



MANUFACTURERS OF

ENGINES AND BOILERS,

Saw Mills, Grist Mills,

TOBACCO FACTORY MACHINERY,

Turbine Water Wheels, Shafting, Hangers, Pulleys, Brass and Iron Castings, Wrought-Iron Work,

AND MACHINERY GENERALLY.